

Data Brief:

COVID-19 Vaccination Barriers and Attitudes among People who Identify as Asian American and Native Hawaiian or Pacific Islander in Philadelphia

Background: The Philadelphia Chinatown Development Corporation (PCDC) and the Pennsylvania Governor’s Advisory Commission on Asian Pacific American Affairs developed a comprehensive survey of Asian American and Native Hawaiian or Pacific Islander (AA & NH/PI) populations in Pennsylvania that asked about residents’ attitudes and beliefs about the COVID-19 vaccine and community barriers to getting vaccinated. From July 2021 to February 2022, data from more than 2,700 respondents were collected, with 966 (35%) adults from Philadelphia. The survey was translated into 21 languages, including Chinese, Korean, Vietnamese, Khmer, and more, and special efforts¹ were made to reach groups that are not often well-represented in national data sources. In 2023, PCDC partnered with the Philadelphia Department of Public Health with support from the [Partnership for Healthy Cities](#) to analyze the survey responses from Philadelphians.

People Who Identify as AA & NH/PI in Philadelphia

134,485

or 8.4% of Philadelphians identified as AA & NH/PI² in 2020

Chinese (33%)
Asian Indian (17%)
Vietnamese (13%)

Top three detailed race groups among Asian Philadelphians³

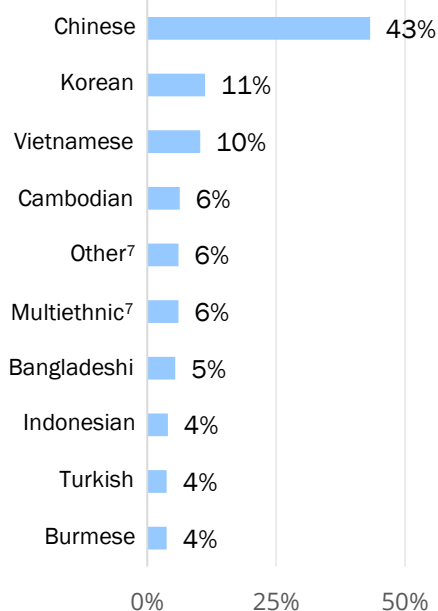
↑ 38%

Increase in the AA & NH/PI population from 2010 to 2020⁴, up from 97,149

Importance: Philadelphians who identify as Asian American and Native Hawaiian or Pacific Islander (AA & NH/PI)⁵ represent a wide variety of cultures, languages, histories, and experiences. Data collection and analysis practices that don’t account for the diversity of languages and cultural identities of this population can miss or mask the health needs of different communities. **Collecting and disaggregating AA & NH/PI data to better understand the barriers to community health among this diverse group of Philadelphians is key to achieving health equity.**

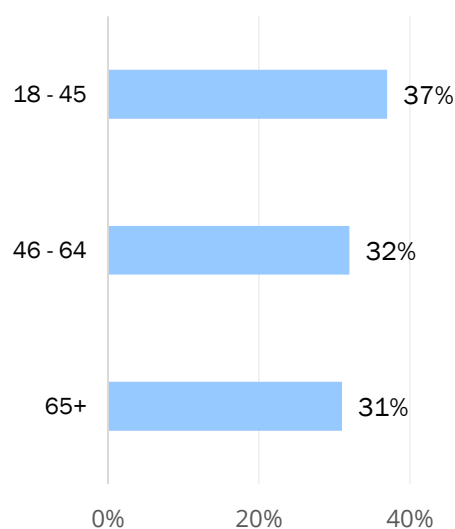
Survey Population: Philadelphia Profile (N=966)

Percent of respondents by ethnicity⁶



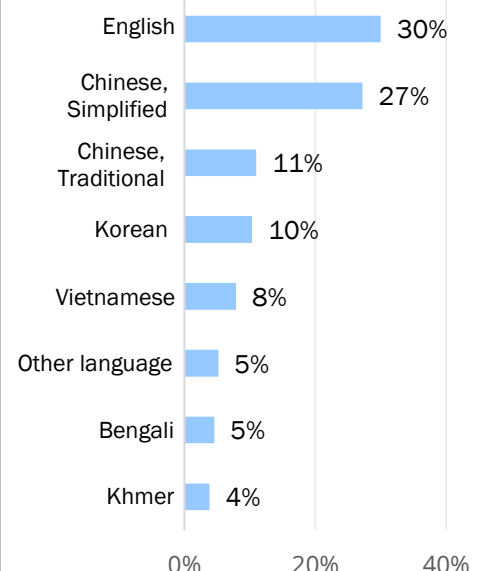
The top three ethnicity groups among survey respondents were **Chinese (43%), Korean (11%), and Vietnamese (10%)**.

Percent of respondents by age group



There was a **wide distribution of ages** among survey respondents, from 18 years to over 65 years of age.

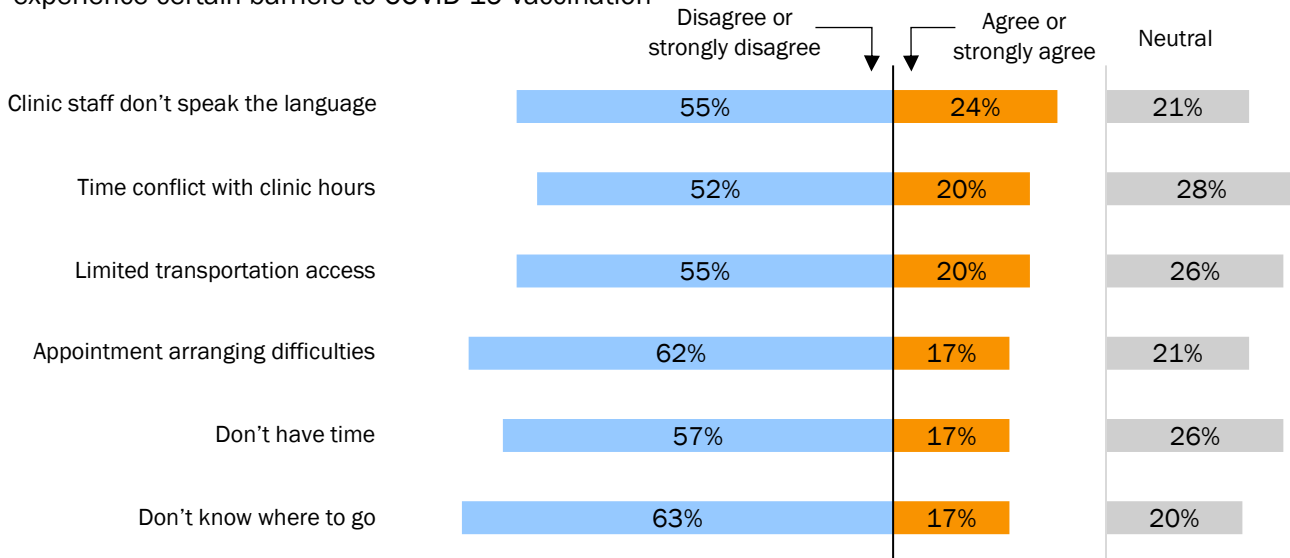
Percent of respondents by survey language



The top three survey languages were **English (30%), Simplified Chinese (27%), and Traditional Chinese (11%)**.

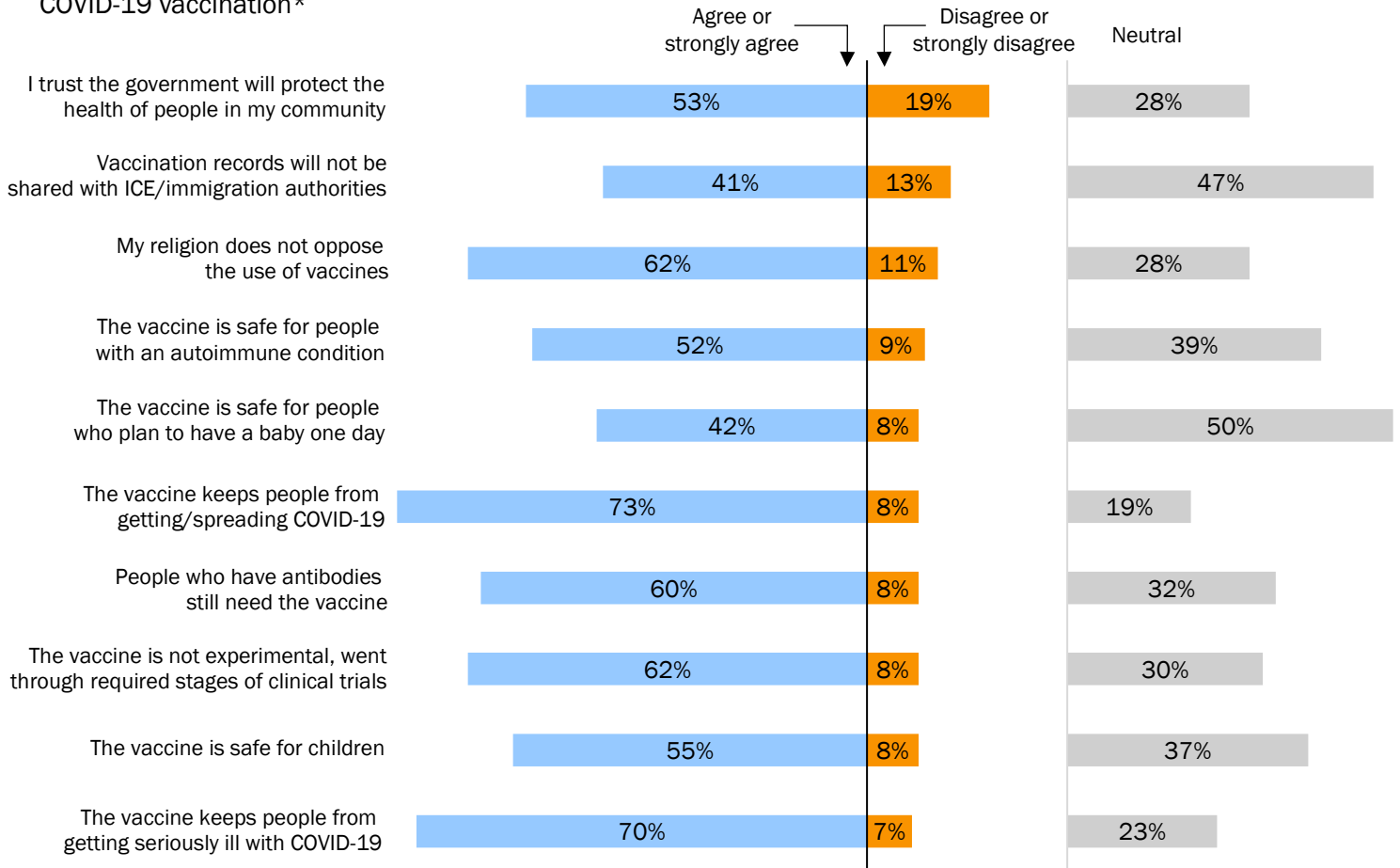
Top barriers to vaccination were language, time conflicts, and transportation. Lack of trust was a common theme among vaccine-negative attitudes.

Percent of Philadelphians who disagreed, were neutral, or agreed when asked whether people in their communities experience certain barriers to COVID-19 vaccination*



The most commonly reported community barriers to COVID-19 vaccination were language (24%), time conflicts (20%), and transportation (20%). Still, most respondents disagreed that their communities experienced each barrier.

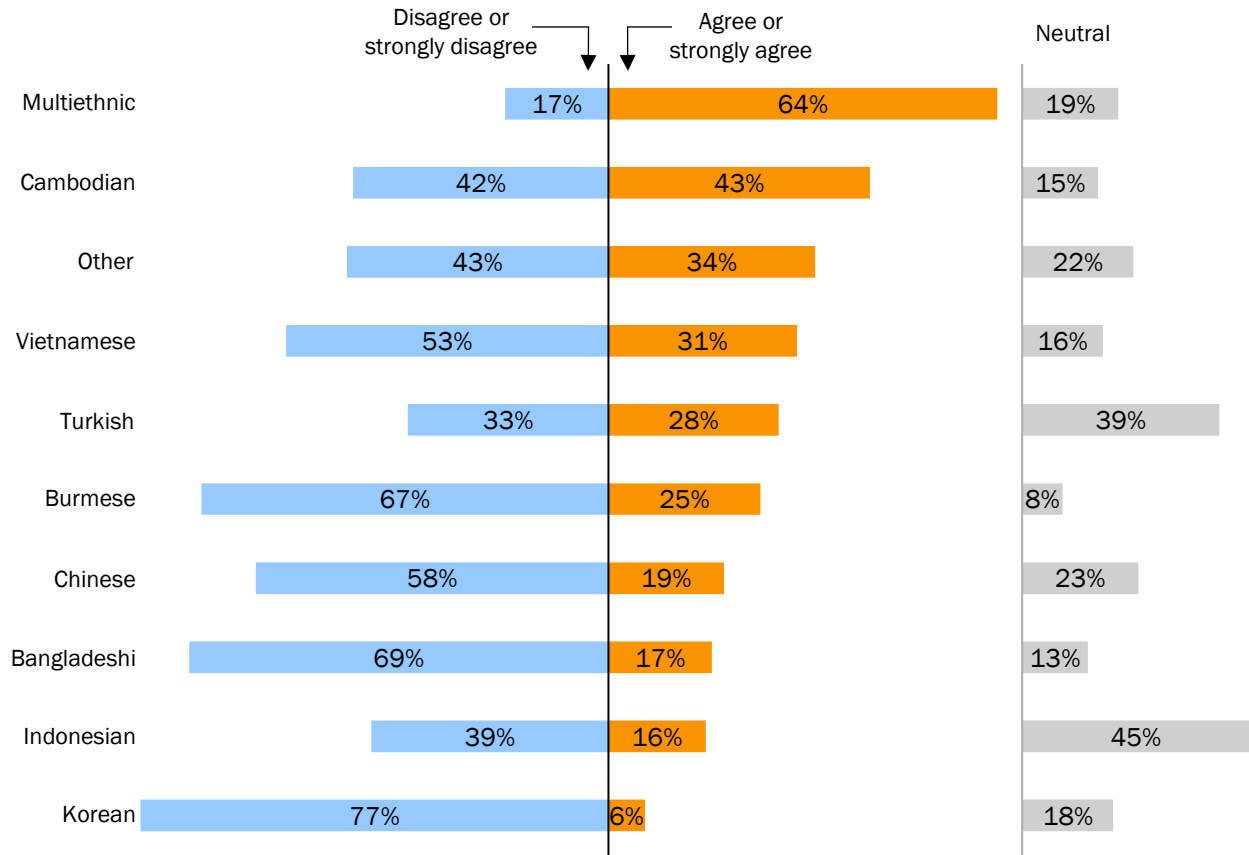
Percent of Philadelphians who agreed, were neutral, or disagreed when asked about their attitudes and beliefs about COVID-19 vaccination*



Survey respondents generally reported vaccination-positive attitudes and beliefs, with less than 20% indicating vaccine-negative attitudes. Lack of trust was a common theme among respondents indicating vaccine-negative attitudes, with 19% of respondents indicating a lack of trust in the government to protect community health and 13% of respondents indicating concern that vaccination records could be shared with ICE or immigration authorities.

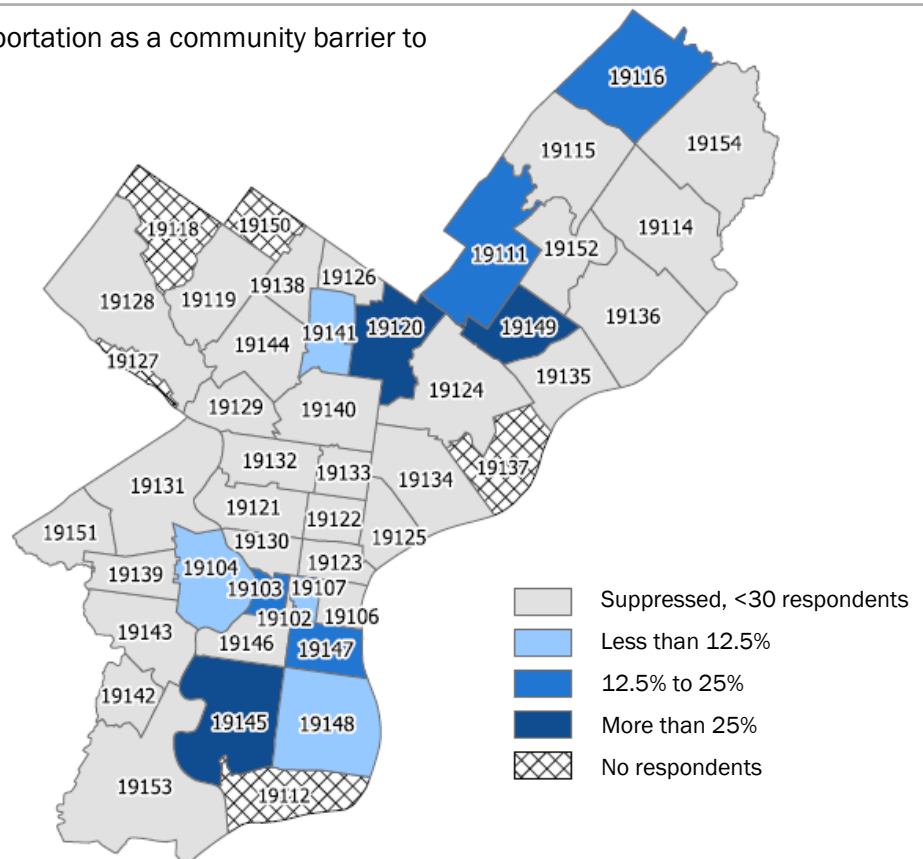
Reporting of language and transportation barriers varied by ethnicity and ZIP Code of residence, respectively.

Percent of Philadelphians who disagreed, were neutral, or agreed that people in their communities could not find clinic staff who spoke their language by selected ethnicities*



Language barriers were most commonly reported by respondents who identified as multiethnic, Cambodian, and those who were grouped into the “other” ethnicity category. This indicates a need for language services among smaller subgroups in AA & NH/PI communities.

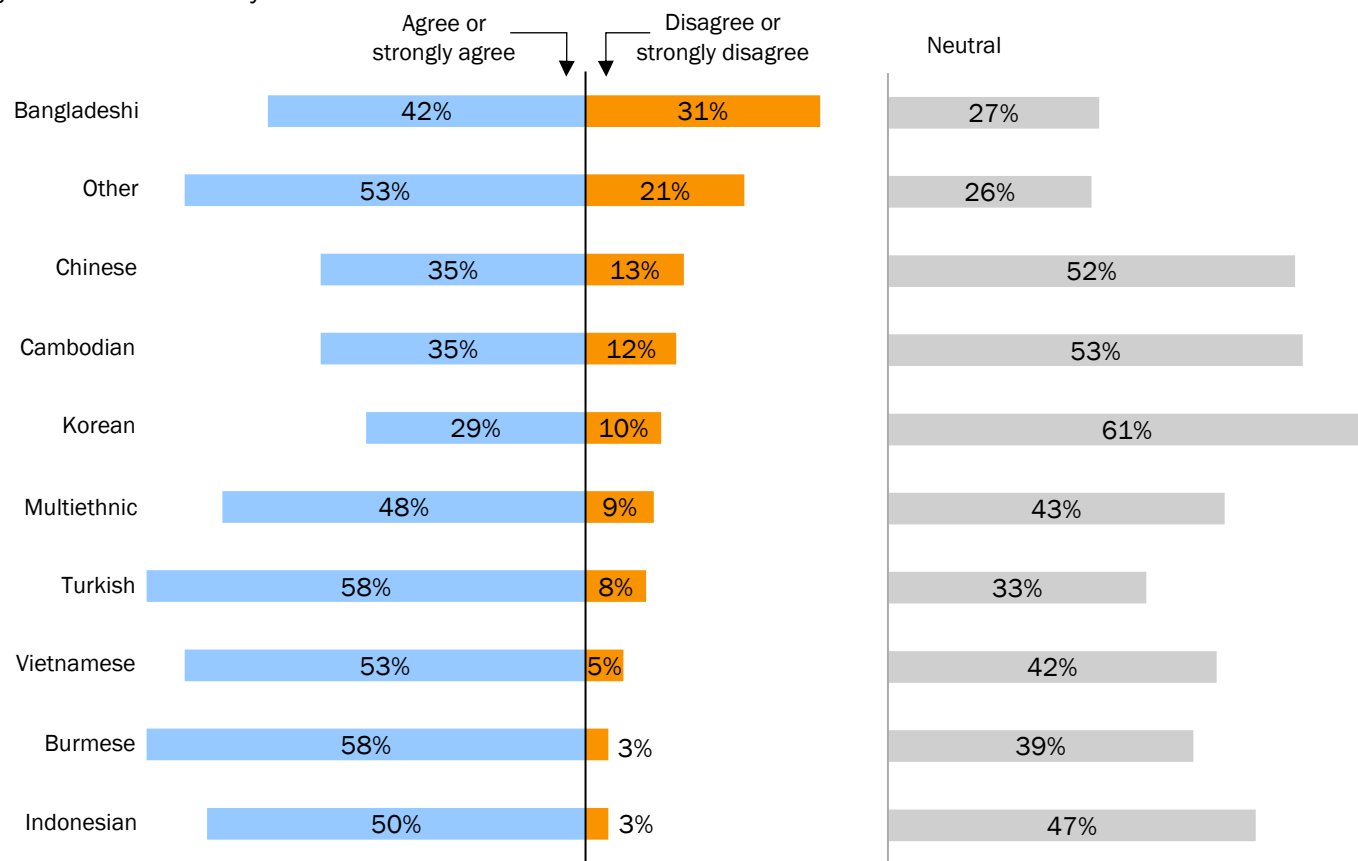
Percent of Philadelphians identifying transportation as a community barrier to COVID-19 vaccination by ZIP Code



Transportation was most commonly reported as a community barrier to COVID-19 vaccination in the 19145, 19120, and 19149 ZIP Codes.

Concerns about data sharing with ICE or immigration authorities varied by ethnicity.

Percent of Philadelphians who agreed, were neutral, or disagreed that “vaccination records will *not* be shared with ICE or immigration authorities” by selected ethnicities*



Respondents who identified as Bangladeshi, Chinese, and those who were grouped into the “other” ethnicity category were as likely or more likely to express concern about data sharing with ICE or immigration authorities compared to the overall Philadelphia survey population (**13%**).

Discussion

Fewer than 1 in 4 Philadelphia respondents reported that people experienced each barrier to vaccination, and fewer than 1 in 5 respondents disagreed with each of the attitude and belief statements, indicating a generally positive view of vaccination. Sampling strategies such as data collection at vaccine clinics likely influenced this result, as respondents in those settings may have been inclined to perceive few barriers and have positive views of vaccination. About 4% of respondents were undecided or against COVID-19 vaccination. The average (mean) number of attitudes indicating a negative view of vaccination cited among this group was about 5, compared to about 1 among those already vaccinated or intending to get vaccinated. The most common vaccine-negative attitudes among respondents who were undecided or against vaccination were disagreement with the statements “the vaccine is safe for people who plan to have a baby someday” and “people who have antibodies still need the vaccine”. Overall, many survey respondents (>40%) were neutral about the statements, “the vaccine is safe for people who plan to have a baby someday” and “vaccination records will not be shared with ICE/immigration authorities”. Addressing these concerns via messaging from a trusted source may help people feel more comfortable getting vaccinated.

Responses to the barrier and attitude questions varied by ethnicity and ZIP Code of residence. For the language barrier, this variation indicates that additional resources for language services among top ethnicity groups could help reduce barriers to care, particularly in smaller subpopulations in AA & NH/PI communities (see note 7). In ZIP Codes most commonly reporting transportation barriers, outreach about existing, low-cost transportation services could improve access. Additionally, among the top ethnicity groups who disagreed with the statement, “vaccination records will not be shared with ICE or immigration authorities,” clarity about how healthcare data will be collected, stored, and handled could help address concerns about patient data being shared with immigration authorities.

Though the COVID-19 pandemic exposed many structural barriers and challenges to achieving health equity in Philadelphia, it also showed how progress can be made by prioritizing and valuing community-based expertise. This brief reflects one step in understanding the health concerns of the diverse AA & NH/PI community in Philadelphia and highlights the importance of integrating community needs and representation into how health data are collected, used, and shared.

Working to Address Barriers

The Philadelphia Chinatown Development Corporation:

- Advances equity in health, housing, and economic opportunity by delivering cultural and language competent services and empowering immigrant residents to self-advocate for community needs. PCDC has advocated for the 37,000 Chinese Americans in Philadelphia since 1966.
- Utilizes trust and leverages partnerships with providers to continue to bridge the gap to access healthcare for physical and mental wellness through education, health screenings, vaccination clinics, and insurance enrollment.
- Tackles systemic and institutional inequities through advocacy and engagement with policy-makers
- To learn more about PCDC's health initiatives and upcoming health events, visit <https://chinatown-pcdc.org>, or follow PCDC on Instagram (@chinatownpcdc) and [Facebook](#).

The Philadelphia Department of Public Health:

- Is committed to centering equity, including in data and analysis work. Data justice is an effort to integrate community needs and representation into how health data are collected, used, and shared. Data justice is a key part of the department's [Plan for Health and Racial Equity](#).
- Maintains a network of [city health centers](#) that provide comprehensive primary healthcare to any Philadelphian, regardless of ability to pay. Translation and interpretation services are available for health center patients and their families.
- Offers drop-in assistance and provides free services to residents at [neighborhood resource hubs](#), including free COVID-19 test kits, free monthly walk-in health screenings, free nicotine replacement therapies (NRT), and more.

Technical Notes:

1. Special efforts included establishing new partnerships with other community-based organizations serving communities within the AA & NH/PI population that PCDC does not regularly serve. Translation assistance and question interpretation assistance was also offered on site for in-person data collection.
 2. Percent of Philadelphia population who identify as “Asian Alone” or “Native Hawaiian and Other Pacific Islander Alone” was calculated using [table P8 of the 2020 Decennial Census, U.S. Census Bureau](#)
 3. Percent of the “Asian Alone” population in Philadelphia by detailed race was calculated using tables [T01001](#) and [P8](#) of the 2020 Decennial Census, U.S. Census Bureau
 4. Percent change in the population who identify as “Asian Alone” or “Native Hawaiian and Other Pacific Islander Alone” was calculated using table [P8 of the 2020](#) and [2010](#) Decennial Censuses, U.S. Census Bureau
 5. The term “Asian American and Native Hawaiian or Pacific Islander” (AA & NH/PI) is used in this report to refer to people who identify as being of Asian, Native Hawaiian, and/or Pacific Islander descent or race/ethnicity. Other terms may be used in different sources to describe this group (such as “Asian American and Pacific Islander” (AAPI) and “Asian Pacific American” (APA)), but all terms are inherently limited in describing this group’s diversity of cultures, languages, histories, and experiences.
 6. The term “ethnicity” was used to ask survey respondents about their identity, but other sources may refer to this concept as “race” or “descendance.” PCDC serves the Chinese population in Philadelphia, and the predominant response by Chinese-identifying Philadelphians and Chinese-speaking Philadelphians reflects this focus.
 7. The “other” ethnicity category includes those identifying as Afghan, Filipino, Indian, Iranian, Japanese, Laotian, Malaysian, Nepalese, Pacific Islander, Thai, or Uzbek. The “multiethnic” category includes those who selected 2 or more ethnicities in the survey.
 8. Breakdowns by ethnicity and survey language are reported for groups with 30 or more respondents. Groups with fewer than 30 respondents were grouped into “other” ethnicity and language categories. Transportation map suppresses percentages for ZIP Codes with fewer than 30 respondents.
- * Sum of categories may total to more than 100% due to rounding

Acknowledgements:

This brief is supported by the Partnership for Healthy Cities, a global network of 74 cities committed to saving lives by preventing noncommunicable diseases (NCDs) and injuries that is supported by Bloomberg Philanthropies in partnership with the World Health Organization and the global health organization Vital Strategies.

We thank the survey participants for their time and for sharing their perspectives.

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