

## Health of Indigenous Peoples of the Americas Living in New York City

*Indigenous peoples of the Americas Epi Research Report Workgroup*

### Introduction

New York City (NYC) is home to the largest urban population of people identifying as Natives, First Nations, and Indigenous peoples of the Americas in the United States (hereafter referred to as Indigenous peoples of the Americas, see p. 5 for a note on terminology). As of 2010, about 112,000 Indigenous peoples of the Americas live in NYC - 1.4% of the population.<sup>1</sup> Natives, First Nations, and Indigenous peoples in NYC represent hundreds of distinct sovereign nations, communities, knowledge and political systems, cultures, and languages, contributing to the unique diversity of NYC. For example, contributors to this Epi Research Report come from the Cheyenne River Sioux, Diné, Garinagu, Kichwa/Quechua, Kumeyaay, Nùu Savi (Nation of the Rain), Haudenosaunee, Nahua, Ohkay Owingeh Pueblo, Shuar, Me'phaa, and White Mountain Apache Nations. Our resistant and resilient communities share similar experiences and histories of colonization, rooted in white supremacy, that continue to this day. At their worst, colonizers perpetrated genocide, including cultural genocide through inhumane policies of assimilation such as forbiddance of cultural practices and Indigenous languages, forced education in non-Indigenous ways of knowing, and forced migration due to land theft and oppression from governments and discriminatory societies.<sup>2</sup> Despite historic and ongoing injustices, Indigenous peoples have been at the forefront of worldwide efforts to confront and reverse the environmental catastrophe caused by climate change, which are and will be to the benefit of all humankind.<sup>3,4</sup> Today, Indigenous peoples of the Americas living in NYC make many contributions to the cultural and economic life of the City, yet many also continue to experience challenges with accessing resources that promote health. This includes being unable to obtain well-maintained and affordable housing, secure jobs with benefits, culturally appropriate health and mental health care, and traditional foods.<sup>5,6</sup>

<sup>1</sup> Norris T, Vines PL, Hoeffel EM. 2010 Census Brief C201BR-10: The American Indian and Alaska Native Population: 2010. *U.S. Census Bureau*; 2012. Accessed Sept. 4, 2019. Available from: [census.gov/population/www/cen2010/glance/2010CensusBriefs.html](https://www.census.gov/population/www/cen2010/glance/2010CensusBriefs.html). See p. 5 for note on the term "Indigenous peoples of the Americas."

<sup>2</sup> UN General Assembly. United Nations Declaration on the Rights of Indigenous Peoples. Accessed September 8, 2021. Available from: [UNDRIP\\_E\\_web.pdf](https://www.un.org/en/development/desa/indigenouspeoples/).

<sup>3</sup> Etchart, L. The role of indigenous peoples in combating climate change. *Palgrave Commun* 3, 17085 (2017). <https://doi.org/10.1057/palcomms.2017.85>

<sup>4</sup> Schramm PJ, Al Janabi AL, Campbell LW, Donatuto JL, Gaughen SC. How Indigenous Communities are Adapting to Climate Change: Insights from the Climate-Ready Tribes Initiative. *Health Affairs* 39(12); 2020. <https://doi.org/10.1377/hlthaff.2020.00997>

<sup>5</sup> Urban Indian Health Institute, Seattle Indian Health Board (2018). Community Health Profile: Individual Site Report: New York Urban Indian Health Program Service Area.

<sup>6</sup> Kaufman D and Perlin R. Surveying Indigenous Latin American Languages in NYC: A report to the NYC Department of Health. Endangered Language Alliance. 2019. Unpublished report.

### Key points

- Data show health disparities between Indigenous peoples and other racial/ethnic groups in New York City, including a lower prevalence of access to health care and a higher prevalence of some chronic conditions. These inequities are rooted in systemic racism.
- Existing health, economic and other forms of inequities have converged during the COVID-19 pandemic to increase risk of exposure, infection, and death among Indigenous peoples.
- The methods for data collection, including terminology used to identify Indigenous peoples, limit utility of data collected and likely underrepresent the population. Methods can be improved.
- A collaboration with Indigenous peoples living in NYC guided the development of this report.

Data collection instruments not having specific enough categories for accurate self-identification and post-data collection recoding or aggregating with other “small groups” have resulted in Indigenous peoples of the Americas being systematically excluded from reports based on race and ethnicity, and therefore, largely invisible to local government agencies, including the NYC Health Department.<sup>7</sup> As a step towards greater visibility and to make data available to Indigenous-led community-based organizations, policy makers, and other groups focused on the health of Indigenous peoples of the Americas in NYC, we developed this report in partnership with members of several Indigenous communities. The analysis of available data presented here reveals that some health outcomes among Indigenous peoples of the Americas in NYC are comparable to those seen among other communities of color in NYC that have been negatively impacted by many years of racist policies and unjust practices among and within institutions. This report describes both our method of collaboration as well as the results of analysis of

select health-related indicators from the American Community Survey, the NYC Community Health Survey, NYC vital records registry, and quotes from in-depth interviews<sup>6</sup> and discussions with Indigenous collaborators for this report. While we acknowledge the limitations of the data (not the least being improper identification of such a diverse peoples and data collection methodologies that were uninformed by Indigenous peoples), we hope this brief report is a starting point to shed light on the health of Indigenous peoples of the Americas living in NYC.

### A note on COVID-19 and Indigenous Peoples of the Americas

Indigenous peoples of the Americas have been significantly impacted by the COVID-19 pandemic in the U.S.<sup>8,9</sup> In NYC what we know about the pandemic’s impact among Indigenous peoples is based on news media, stories shared on social media, and current communications with Indigenous community members through the NYC Health Department’s ongoing community partner engagement activities (see implications, p. 11). As noted, race-specific data for

“American Indians/Alaska Natives” has important limitations that extend to COVID-19-related data.<sup>10</sup> As a result, the pandemic’s impact among Indigenous peoples of the Americas has not been quantified using traditional public health data tools. The NYC Health Department is working with healthcare facilities to make race-specific data more specific and complete; however, the pre-existing challenges in collecting and reporting data for Indigenous peoples may continue to limit the completeness of the data.

Systemic oppression has put Indigenous peoples of the Americas at high risk for exposure, infection, and death from COVID-19.<sup>11</sup> Government-imposed impoverishment of Indigenous peoples has led to the embodiment of inequities which today are reflected as chronic or underlying conditions.<sup>12,13,14</sup> When infected with COVID-19, these chronic, underlying conditions increase the risk of death, especially among Indigenous elders. Additionally, the death of elders in Indigenous communities has wide-reaching impacts for the cultural and linguistic knowledge

<sup>7</sup> Jim MA, Arias E, Seneca DS, Hoopes MJ, Jim CC, Johnson NJ, Wiggins CL. Racial Misclassification of American Indians and Alaska Natives by Indian Health Service Contract Health Service Delivery Area. *Am J Public Health*. 2014 June; 104(Suppl 3): S295–S302.

<sup>8</sup> APM Research Lab. The Color of Coronavirus: Covid-19 Deaths by Race and Ethnicity in the U.S. APM Research Lab website. Retrieved September 2, 2020. <https://www.apmresearchlab.org/covid/deaths-by-race>

<sup>9</sup> Akee R. How Covid-19 is Impacting Indigenous Peoples in the U.S. PBS News Hour. May 13, 2020. (Republished from EconoFact, [www.econofact.org](http://www.econofact.org), May 12, 2020) Retrieved September 2, 2020. <https://www.pbs.org/newshour/nation/how-covid-19-is-impacting-indigenous-peoples-in-the-u-s>

<sup>10</sup> Nagle R. Native Americans Being Left Out of U.S. Coronavirus Data and Labelled as ‘Other.’ *The Guardian*. Apr 24, 2020. Retrieved September 2, 2020. <https://www.theguardian.com/us-news/2020/apr/24/us-native-americans-left-out-coronavirus-data>

<sup>11</sup> Kurtice K, Choo E. Indigenous populations: Left Behind in the COVID-19 Response. *Lancet* June 2020; 395 (10239). doi: [https://doi.org/10.1016/S0140-6736\(20\)31242-3](https://doi.org/10.1016/S0140-6736(20)31242-3)

<sup>12</sup> Krieger N. *Embodying Inequality: Epidemiologic Perspectives*. Routledge 2005.

<sup>13</sup> Power T, Wilson D, Best O, et al. COVID-19 and Indigenous Peoples: An Imperative to Action. *J Clin Nurs*. 2020; 29(15-16): 2737-2741. doi: 10.1111/jocn.15320

<sup>14</sup> Wiedman D. Native American Embodiment of the Chronicities of Modernity. *Med Anthro Quarterly*. 2012; 26(4): 595-612.

of the community, thereby deepening the losses.<sup>15,16</sup>

Many Indigenous peoples of the Americas were forced to migrate from their homelands in Latin America due to war or persecution, land theft and displacement, and impoverishment.; often their status as Indigenous peoples is unrecognized in the U.S.<sup>17,18</sup> For Indigenous peoples with a precarious immigration status, their risk of infection may also come from detention in Immigration and Customs Enforcement (ICE) facilities, where high rates of infection have been reported.<sup>19</sup> Further, deportation to countries of origin means Indigenous migrants may return infected with COVID-19 and spread the infection in their communities of origin.<sup>20</sup> For Indigenous migrants living in the U.S., a precarious immigration

status may lead to indefinite periods of family separation or exclusion from federal and state assistance, such as unemployment benefits, in addition to employer-based benefits, such as paid sick-leave.<sup>21</sup> Despite New York State's stay-at-home orders, the inaccessibility of the existing safety nets forced many Indigenous migrants to continue working either through their own self-initiated subsistence projects, such as the production of face coverings at a time when these were unavailable even to healthcare workers,<sup>22</sup> or through the continuation of their jobs as essential workers in the food, construction and housekeeping industries. Three-quarters of NYC's frontline essential workers are people of color, and more than half were born outside of the U.S, yet these same workers are often ignored and made to feel

expendable.<sup>23,24</sup> Additionally, because of a long history of abuse by the government, Indigenous migrants may be unwilling to access available social and medical services,<sup>25</sup> and when they do, also experience linguistic barriers as interpretation services in Indigenous languages may be unavailable.<sup>26</sup> It is unjust circumstances such as these that have put Indigenous peoples at high risk of exposure to and death from COVID-19.

Given the high rates of illness and death among Indigenous peoples of the Americas in the U.S., when COVID-19 vaccines became available in early 2021, many got vaccinated.<sup>27</sup> A responsibility to protect their communities and cultural knowledge for future generations has been cited as a driving motivation to be vaccinated.<sup>28</sup> Nationally, the rate

<sup>15</sup> Morales L. Navajo Nation Loses Elders and Tradition to COVID-19 [transcript]. *Weekend Edition Sunday*. National Public Radio, May 31, 2020.

Retrieved September 2, 2020. <https://www.npr.org/2020/05/31/865540308/navajo-nation-loses-elders-and-tradition-to-covid-19>

<sup>16</sup> Coronavirus Victims: Fluent Cherokee Speaker Edna Rapper [transcript]. *All Things Considered*. National Public Radio, August 21, 2020. Retrieved September 2, 2020. <https://www.npr.org/2020/08/21/904798123/coronavirus-victims-fluent-cherokee-speaker-edna-rapper>

<sup>17</sup> Yescas C. Hidden in Plain Sight: Indigenous Migrants, Their Movements, and Their Challenges. *Migration Information Source*. 2010. Accessed November 4, 2021. <https://www.migrationpolicy.org/article/hidden-plain-sight-indigenous-migrants-their-movements-and-their-challenges>

<sup>18</sup> To Be Indigenous and a Citizen of Latin America. The World Bank. August 9, 2017. Accessed November 5, 2021.

<https://www.worldbank.org/en/news/feature/2017/08/09/ser-indigena-ciudadano-latinoamerica>

<sup>19</sup> Casanova FO, Hamblett A, Brinkley-Rubinstein L, Nowotny KM. Epidemiology of Coronavirus Disease 2019 in US Immigration and Customs Enforcement Detention Facilities. *JAMA Netw Open*. 2021; 4(1):e2034409. doi:10.1001/jamanetworkopen.2020.34409

<sup>20</sup> Brigida AC, Pérez Joachin M. The Coronavirus Pipeline. *Texas Observer*. Aug 11, 2020. Retrieved September 2, 2020.

<https://www.texasobserver.org/the-coronavirus-pipeline/>

<sup>21</sup> Amandolare S, Gallagher L, Bowles J, Dvorkin E. Under Threat and Left Out: NYC's Immigrants and the Coronavirus Crisis. Center for an Urban Future website. June 2020. Retrieved September 2, 2020. <https://nycfuture.org/research/under-threat-and-left-out>

<sup>22</sup> Soloff AK. In New York City Indigenous Mexicans Battle Coronavirus Amid Language Barriers, Bias. *NBC News*. May 16, 2020. Retrieved September 2, 2020. <https://www.nbcnews.com/news/latino/new-york-city-indigenous-mexicans-battle-coronavirus-amid-language-barriers-n1206136>

<sup>23</sup> Excluded in the Epicenter: Impacts of the COVID Crisis on Working-class Immigrant, Black, and Brown New Yorkers. *Make the Road NY*. May 2020. Retrieved September 2, 2020. [https://maketheroadny.org/wp-content/uploads/2020/05/MRNY\\_SurveyReport\\_small.pdf](https://maketheroadny.org/wp-content/uploads/2020/05/MRNY_SurveyReport_small.pdf)

<sup>24</sup> New York City's Frontline Workers. <https://comptroller.nyc.gov/reports/new-york-citys-frontline-workers/>. Accessed August 19, 2021.

<sup>25</sup> Associated Press. Latinos' Health is Threatened by Coronavirus Misinformation as Well as Fear, Distrust. *NBC News*. Aug 14, 2020. Retrieved September 2, 2020. <https://www.nbcnews.com/news/latino/latinos-health-threatened-coronavirus-misinformation-well-fear-distrust-n1236732>

<sup>26</sup> Miller L. California's Indigenous Mexicans and Guatemalans Miss Vital Pandemic Information Due to Language Barriers. *Los Angeles Times*. May 1, 2020. Retrieved September 2, 2020. <https://www.latimes.com/california/story/2020-05-01/la-me-indigenous-immigrants-language-barriers-coronavirus>

<sup>27</sup> Centers for Disease Control and Prevention. COVID Data Tracker. Centers for Disease Control and Prevention website. Accessed August 8, 2021.

<https://covid.cdc.gov/covid-data-tracker/index.html#vaccination-demographics-trends>

<sup>28</sup> Urban Indian Health Institute. Results from a National COVID-19 Vaccination Survey: Strengthening Vaccine Efforts in Indian Country. Urban Indian Health Institute, Seattle, WA. 2021. Accessed October 4, 2021. <https://www.uihi.org/projects/strengthening-vaccine-efforts-in-indian-country/>

of vaccination is higher among people classified by the Centers for Disease Control and Prevention as non-Hispanic American Indian/Alaska Native than among other racial and ethnic groups in the U.S. The success can be attributed, at least in part, to the distribution of vaccine through the Indian Health Service (IHS).<sup>29</sup> However, in many urban communities, including NYC, Indigenous peoples who are among those recognized groups that are eligible for IHS services lack access to full IHS services. Other Indigenous peoples of the Americas in NYC are from unrecognized groups that are not served by IHS. Existing barriers to receiving care in NYC have extended to uptake of COVID-19 vaccines, such as concerns about discrimination, cultural and language barriers, and fear of deportation among undocumented people. (See p. 13 for information on outreach efforts to Indigenous communities.)

## Methods

### Community engagement

Building on the NYC Health Department's commitment to meaningful community engagement to advance health equity,<sup>30</sup> we began this work to understand and respond to the priorities and concerns of Indigenous peoples of the Americas. However, inconsistent funding and bureaucratic practices and policies have been important challenges to meaningful engagement in a committed and timely manner. Initially, this

## “Existing barriers to receiving care in NYC have extended to uptake of COVID-19 vaccines.”

engagement focused on Indigenous migrants from Latin America, and was later expanded to include Indigenous peoples from all parts of the Americas given the close and historical relations among First Nations, Native, and Indigenous peoples before colonization.

The NYC Health Department's first research project to learn more about Indigenous peoples of the Americas living in NYC was a community-based participatory qualitative study with peoples of Nahua, Mixtec, Garifuna, Quichua, K'iche and Mam identities in partnership with the Endangered Language Alliance (ELA), a non-profit organization dedicated to the documentation and preservation of Indigenous and minority languages. Several of the quotes in this report come from those interviews.<sup>6</sup> Five of the co-researchers in the qualitative research study also participated in the creation of this report. Several of these co-researchers are also affiliated with organizations led by members of their Indigenous community in NYC (for example, the Garifuna Coalition, a coalition of advocates for the Garifuna community; Kichwa Hatari, a collective of Kichwa artists, advocates, and educators; and, Nación Shuar en Nueva York, a grassroots organization consisting of Shuar peoples from the Ecuadorian Amazon region).

Community engagement at various events on evenings and weekends led to partnerships with members of other organizations, such as the American Indian Community House, a non-profit organization serving urban Natives since 1969, and the Red de Pueblos Transnacionales, a grassroots organization comprised of migrants from Mexico.

These partnerships with Indigenous peoples of the Americas from different regions are what led to the formation of the workgroup for the creation of this Epi Research Report (see p. 14 for members and affiliations). The workgroup met five times between December 2018 and July 2019, as well as corresponded by e-mail. As a starting point, the group reviewed the nature of available quantitative data (collection methods and purpose of data sources) and discussed the limitations of racialized data, the terminology used to classify Indigenous peoples of the Americas, and the topics covered. Next, the group reviewed topics and indicators that could be included in the analysis, based on the data already collected, and prioritized them. We also considered options for visualizing the data and selected a style that would be accessible to many. In addition, the group reviewed draft text for the report.

<sup>29</sup> Bennett S. American Indians have the highest Covid vaccination rate in the US. *NOVA Newsletter*. July 6, 2021. Accessed August 8, 2021. <https://www.pbs.org/wgbh/nova/article/native-americans-highest-covid-vaccination-rate-us/>

<sup>30</sup> New York City Department of Health and Mental Hygiene (NYC DOHMH). Race to Justice. NYC DOHMH website. Accessed August 19, 2021. <https://www1.nyc.gov/site/doh/health/health-topics/race-to-justice.page>



**Racial/ethnic analysis of survey and birth data**

Racial and ethnic data in the NYC Community Health Survey (CHS), American Community Survey (ACS) and NYC birth certificate data were classified as follows (see figure below): Survey respondents (CHS, ACS) or birthing parents (from birth certificate data) were classified into one of the following mutually exclusive categories: those who indicated they were American Indian/Alaska Native either alone or in combination with another race, multiple races, and or Latino/a ethnicity were classified as Indigenous peoples; respondents or birthing parents who indicated Asian or Asian/Pacific Islander, Black or White race alone (single race) were classified as those single races; respondents or birthing parents who indicated

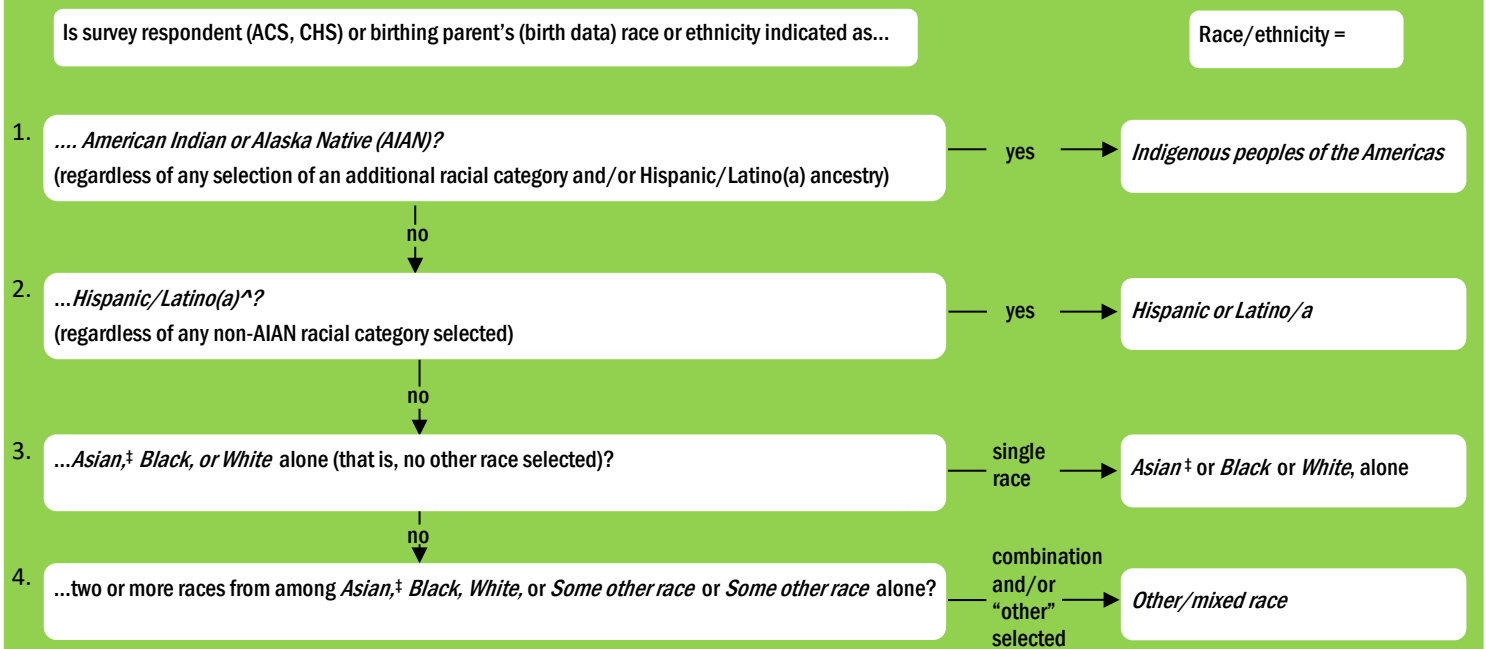
Hispanic or Latino/a ethnicity were classified as Latino/a, regardless of selected race or races except those who indicated American Indian/Alaska Native heritage (included in the Indigenous peoples group); respondents or birthing parents who indicated more than one race other than American Indian/Alaska Native were classified as other or mixed race.

In our workgroup discussions it was agreed that although the term “Indigenous peoples of the Americas” does not adequately speak to the sovereignty of different people, it could serve as a unifying term in the context of this report and reflects usage in other publications. The U.S. Census defines the American Indian/Alaska Native (AI/AN) population as any people who select the AI/AN checkbox or

report “origins in any of the original peoples of North and South America (including Central America) and who maintain tribal affiliation or community attachment.”<sup>1</sup> In the spirit of that broad definition, we use the term “Indigenous peoples of the Americas” throughout this report, rather than “American Indian/Alaska Native,” while recognizing that the specific terminology used in the Census and other data sources limits the identification of this group (see “limitations and implications,” p.12). The term “Indigenous peoples of the Americas” is also limited; the “Americas” is a name with colonial origins and obfuscates the names that Indigenous peoples had and have for the land, including Turtle Island and Abya Yala.

**Schema to define racial/ethnic groups for analysis of quantitative data about Indigenous peoples of the Americas living in New York City**

Three data sources – the NYC Community Health Survey (CHS), the American Community Survey (ACS), and the NYC Confidential Medical Report of Birth – collected data separately about race and about Hispanic/Latino(a) ethnicity or ancestry. For each data source, race is indicated as one or more racial categories; Hispanic/Latino ethnicity is indicated as “yes” or “no.” Racial and ethnic data were combined to create categories as follows:



<sup>^</sup> includes “Spanish” on the birth record only ‡Asian/Pacific Islander represented in CHS and ACS data

Sources: NYC Community Health Survey; Integrated Public Use Microdata Series, U.S. Census American Community Survey; and NYC DOHMH Bureau of Vital Statistics, 2013-2017

## Statistical comparisons

To highlight health inequities, we compared rates among Indigenous peoples of the Americas in NYC to rates among these racial/ethnic groups: Asian/Pacific Islander (or Asian), Black, Latino/a, and White, to determine if rates were significantly different (that is, the difference is unlikely to have occurred by random chance). For survey-derived indicators, we conducted t-tests to determine statistically significant differences at the  $p < 0.05$  level. Z-tests were also conducted to compare prevalence among Indigenous peoples in NYC to the citywide average. For birth data, we calculated 95% confidence intervals and assumed rates among birthing parents Indigenous to the Americas living in NYC and birthing parents of other racial/ethnic groups in NYC were significantly different if the confidence intervals did not overlap. Comparisons that state a rate or prevalence is higher or lower indicate that there is a statistical difference between the groups.

## Reading this report

Throughout this report, we present rates for Indigenous peoples and the citywide average for each measure. To keep the focus on data for Indigenous peoples of the Americas, we present data for the racial/ethnic group with the most significantly different rate from Indigenous peoples that highlights an inequitable result (for example, a significantly higher rate of being uninsured or lower rate of flu vaccination among Indigenous peoples of the Americas in NYC compared with another racial/ethnic group). Only the largest inequitable difference between Indigenous peoples of the Americas and another racial/ethnic group are mentioned in text and visualized, although there may be more than one group with a significant result (for example, both White and Asian/Pacific Islander New Yorkers are less likely to have high blood pressure than Indigenous peoples, but only the larger difference is highlighted).

As noted, some health outcomes among Indigenous peoples of the Americas in NYC are comparable to those seen among other communities of color in NYC that have been negatively impacted by structural and institutional racism. In some cases, there may be a racial/ethnic group with a statistically different rate that is less favorable than the rate among Indigenous peoples of the Americas; as the focus of the report is on Indigenous peoples, those results are not presented in the text. Data for all groups are shown in the appendix. The following colors are used, where applicable, to indicate groups in the figures included in this report:

Indigenous peoples
Group with lowest or highest percentage
NYC overall

**“...some health outcomes among Indigenous peoples of the Americas in NYC are comparable to those seen among other communities of color in NYC that have been negatively impacted by structural and institutional racism.”**

### Definitions:

**Race/ethnicity:** **Indigenous peoples:** People identified as American Indian/ Alaska Native (AI/AN), alone or in combination with another race(s) or Latino/a ethnicity. **Asian or Asian/ Pacific Islander, Black, or White** race categories include people who identified as those single races. **Latino/a** includes Hispanic or Latino/a people of any race except AI/AN. **Other or mixed race** does not include any people who identified as AI/AN or Latino but selected two or more races from among Asian, Black, White, or Other, or selected Other.

**Limited English-speaking households** are those in which all members 14 years old and older have at least some difficulty with English.

**Timely colonoscopy:** among adults 50 years or older, received a colonoscopy within the past 10 years.

**Overweight/obesity:** Body Mass Index (BMI) among adults is calculated based on self-reported weight and height. **Overweight** = BMI between 25 and 29.9; **Obesity** = BMI of 30 or greater.

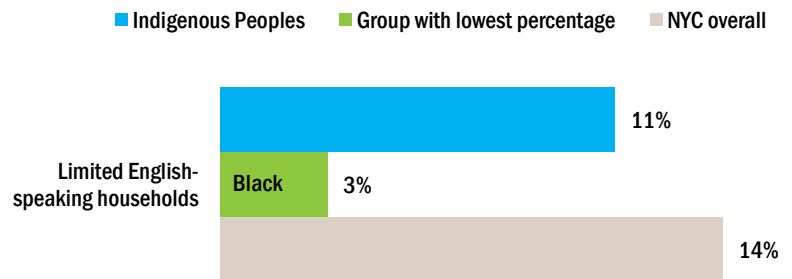
**Nutrition:** **Sugary drink** consumption (including soda, sports drinks, sweet iced tea, or other sweetened drinks) = average drinks per day; **fruit and vegetable consumption** measured by number of servings eaten the previous day (a serving is equivalent to one medium apple, a handful of broccoli, or a cup of carrots).

## Social and Economic Conditions<sup>A</sup>

### Linguistic diversity

Accessing health care and social services in one’s primary language promotes health through improved confidence in the health care system, reduced misdiagnosis and medication error, and enhanced patient confidentiality. Indigenous peoples in NYC come from South, Central, and North America and the Caribbean and speak hundreds of languages (see maps in appendix and <https://languagemap.nyc> for a digital map of languages spoken in NYC). In NYC, services in one’s primary language are often not available, and English proficiency is necessary to access care. In 2013-2017, 11% of Indigenous peoples of the Americas in NYC lived in limited English-speaking households.

Limited English-speaking households among Indigenous peoples of the Americas living in New York City, 2013-2017



Indigenous peoples includes American Indian/Alaska Native either alone or in combination with other races and/or Latino/a ethnicity. Black includes non-Latinos/Latinas who selected only one race.  
 Source: Integrated Public Use Microdata Series, U.S. Census American Community Survey 2013-2017

### Education

Higher education levels are associated with better health outcomes. Among adults 25 years and older, three out of four Indigenous peoples of the Americas in NYC had a high school diploma, GED or higher education in 2013-2017; the rate is lower than among White adults (74% vs. 93%). About 27% of Indigenous peoples had a college degree or higher education compared with 56% of White adults.

Percentage of Indigenous peoples of the Americas living in New York City with high school or higher education, 2013-2017

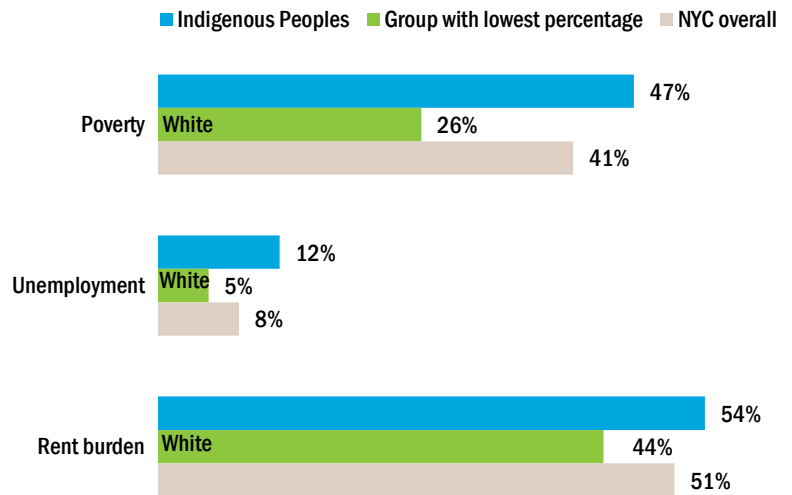


Among adults 25 years and older.  
 Indigenous peoples includes American Indian/Alaska Native either alone or in combination with other races and/or Latino/a ethnicity. White includes non-Latinos/Latinas who selected only one race.  
 Source: Integrated Public Use Microdata Series, U.S. Census American Community Survey 2013-2017

## Economic injustice

There is a strong relationship between health and wealth – income provides access to resources that influence health such as good nutrition, quality housing, and timely medical care. Past and present barriers to building wealth in communities of color have a lasting effect on health. In 2013-2017, nearly half (47%) of Indigenous peoples of the Americas living in NYC had household incomes that were less than 200% of the federal poverty level, compared with a quarter of White New Yorkers (26%). About 12% of Indigenous peoples in the workforce in NYC were unemployed, more than double the percentage of White New Yorkers (5%). Many New Yorkers pay a large portion of their income towards rent. Among Indigenous peoples, 54% paid more than 30% of their income towards rent, compared with 44% among White New Yorkers.

### Economic conditions among Indigenous peoples of the Americas living in New York City, 2013-2017



Poverty defined as household income less than 200% of the federal poverty level. Unemployment is among those in the workforce 16 years and older. Rent burden defined as rent more than 30% of household income. Indigenous peoples includes American Indian/Alaska Native either alone or in combination with other races and/or Latino/a ethnicity. White includes non-Latinos/Latinas who selected only one race. *Source: Integrated Public Use Microdata Series, U.S. Census American Community Survey 2013-2017*

“I'm okay now, but in 2003 I was in pretty bad shape and I didn't know what my pain was about... Then I left my job and went to look for medicine from a doctor, my pain was getting really bad, I wasn't able to sleep because part of my body was in pain. Once I got to the doctor... he said, `Come with me, you are in pretty bad shape.' I don't know what to call it in Mixtec. Pneumonia. Yes, that's what he found, but I didn't know what it was. And then he said to me, `Why did you take so long?' And as you know, here if I stop working [I'll be unable to pay bills], so I thought the rent is going to be a lot. Then the doctor said to me, `Is your life more important, or the rent? Do you think you're going to be able to buy your life or the rent?' I will be able to pay the rent, but not my life. Then I spent a month [in the hospital]. A month.”

-Mixtec New Yorker describing a chronic health issue and his paying the rent versus getting treatment.<sup>6</sup>



## Access to health care and insurance<sup>B</sup>

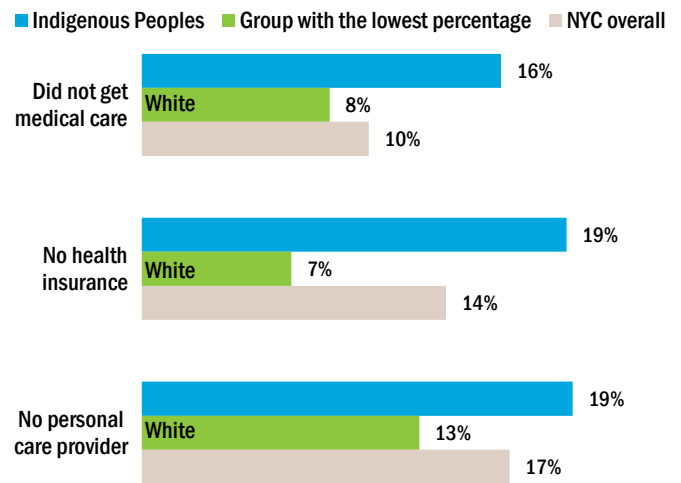
In 2013-2017, among adults, Indigenous peoples of the Americas living in NYC were twice as likely as White adults to report there was a time in the previous 12 months when they needed medical care but did not get it (16% vs. 8%).

One in five Indigenous adults in NYC reported they did not have health insurance, compared with one in fifteen White adults (19% vs. 7%). On average, 14% of NYC adults did not have health insurance in 2013-2017.

Similarly, Indigenous peoples of the Americas were more likely than White adults to report they did not have a personal doctor or health care provider (19% vs. 13%). Citywide, 17% of adults reported they did not have a personal care provider.

**"It's hard to find doctors who understand us as Indigenous people." – Kumeyaay New Yorker, about why some people may report they do not get needed medical care.**

### Access to appropriate care among Indigenous peoples of the Americas living in New York City, 2013-2017



Among adults 18 years and older. Indigenous peoples includes American Indian/Alaska Native either alone or in combination with other races and/or Latino/a ethnicity. White includes non-Latinos/Latinas who selected only one race.

Source: NYC Community Health Survey 2013-2017; data are age-adjusted

## Healthy Living<sup>B</sup>

### Self-reported health

How people feel about their own health can be a good measure of overall physical and mental health. In 2013-2017, Indigenous adults living in NYC were less likely than White New Yorkers to rate their health as excellent, very good, or good (72% vs. 86%). The NYC average was 78%.

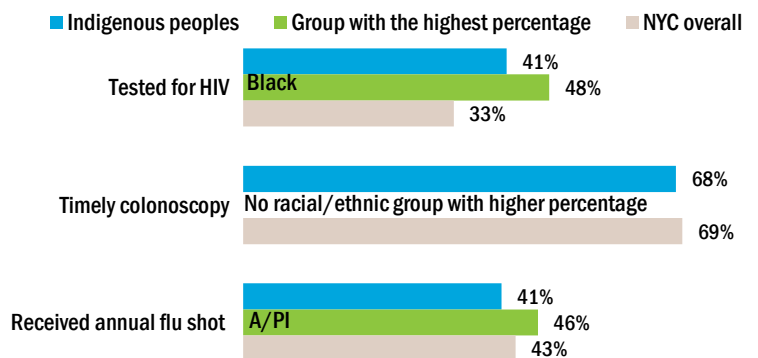
### Preventive screenings and vaccination

Screenings and vaccinations are important to prevent or help identify illnesses that can be treated. In 2013-2017, 41% of NYC Indigenous adults reported having had an HIV test in the past 12 months, a lower proportion than among Black adults (48%), but higher than the citywide average (33%).

Among those 50 years and older, about seven in ten Indigenous adults (68%) reported they had had a timely colonoscopy screening for colorectal cancer, a prevalence similar to other racial/ethnic groups and the citywide average (69%).

Citywide, less than half of adults reported they got an annual influenza (flu) vaccine during 2013-2017; the prevalence was higher among Asian/Pacific Islanders, compared with Indigenous adults in NYC (46% vs. 41%).

### Preventive screenings and vaccination among Indigenous peoples of the Americas living in New York City, 2013-2017



Tested for HIV and received annual flu shot are within 12 months before the survey and among adults 18 years and older. Timely colonoscopy is within the last 10 years among adults 50 years and older. Indigenous peoples includes American Indian/Alaska Native either alone or in combination with other races and/or Latino/a ethnicity. Black and Asian/Pacific Islander (A/PI) categories include non-Latinos/Latinas who selected only one race.

Source: NYC Community Health Survey 2013-2017; data are age-adjusted

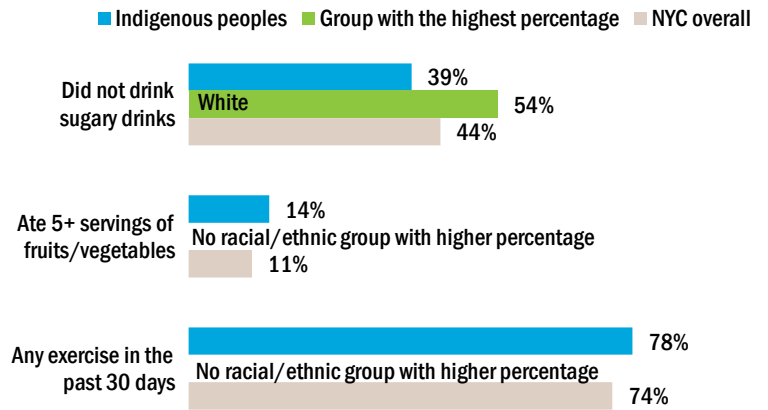
## Diet and physical activity

Two in five Indigenous adults in NYC (39%) reported not drinking sugary drinks such as soda, sports drinks, sweet iced tea, or other sweetened drinks, on an average day compared with half of White adults (53%). Overall, 44% of New Yorkers refrained from drinking sugary drinks on an average day.

One in seven (14%) Indigenous adults in NYC consumed five or more servings of fruits and vegetables per day, similar to the citywide average of 11%.

More than three quarters of Indigenous adults (78%) reported they got some physical activity in the past 30 days. The citywide average was 74%.

### Prevalence of diet and physical activity behaviors among adults Indigenous to the Americas living in New York City, 2013-2017

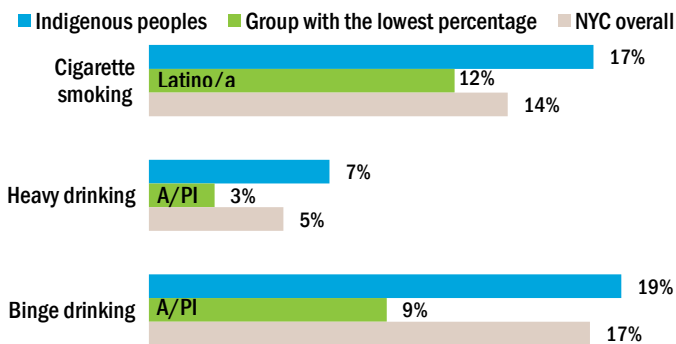


Among adults 18 years and older. Sugary drink consumption is on average per day; Fruit/vegetable consumption is total servings on the previous day. Indigenous peoples includes American Indian/Alaska Native either alone or in combination with other races and/or Latino/a ethnicity. Asian/Pacific Islander (A/PI) includes non-Latinos/Latinas who selected only one race.  
 Source: NYC Community Health Survey 2013-2017; data are age-adjusted

**"Access to food is limited by low income and unemployment, which also impacts mental health. Colonization has taken away our life ways and led to poor outcomes."  
 – White Mountain Apache New Yorker reflecting on the food environment in NYC.**

## Cigarette smoking and alcohol use

### Prevalence of smoking cigarettes and using alcohol among Indigenous peoples of the Americas living in New York City, 2013-2017



Among adults 18 years and older. Heavy drinking: an average of more than 2 drinks per day for men and more than 1 drink per day for women in the past 30 days. Binge drinking: five or more drinks on one occasion for men and four or more drinks on one occasion for women in the past 30 days. Indigenous peoples includes American Indian/Alaska Native (AI/AN) either alone or in combination with other races and/or Latino/a ethnicity. Asian/Pacific Islander (A/PI) includes non-Latinos/Latinas who selected only one race. Latino/a includes Hispanic or Latino/a of any race except AI/AN.

Source: NYC Community Health Survey 2013-2017; data are age-adjusted

In 2013-2017, the prevalence of smoking cigarettes among Indigenous adults in NYC was 17%, higher than the prevalence among Latino/a adults (12%) and the citywide average of 14%.

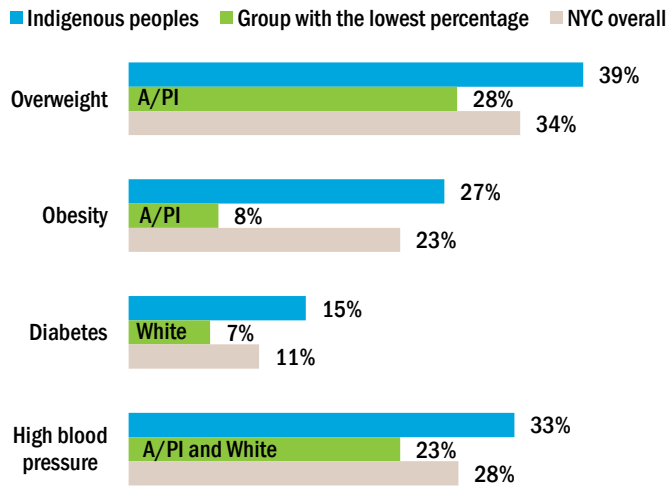
The prevalence of heavy drinking (on average, more than two drinks a day for men and more than one drink a day for women in the past 30 days) was higher among Indigenous adults than among Asian/Pacific Islander adults (7% vs. 3%).

Similarly, the prevalence of binge drinking (five or more drinks for men, four or more for women, on one occasion in the past 30 days) was two times as high among Indigenous adults in NYC than among Asian/Pacific Islander adults (19% vs. 9%).

## Health Outcomes<sup>B,C</sup>

### Chronic health conditions among adults

#### Prevalence of chronic health conditions among Indigenous peoples of the Americas living in New York City, 2013-2017



Among adults 18 years and older. Indigenous peoples includes American Indian/Alaska Native (AI/AN) either alone or in combination with other races and/or Latino/a ethnicity. Asian/Pacific Islander (A/PI) and White include non-Latinos/Latinas who selected only one race. *Source: NYC Community Health Survey 2013-2017; data are age-adjusted*

Risks associated with heart disease, a leading cause of premature death, include having overweight or obesity, diabetes, and high blood pressure. In 2013-2017, nearly two in five Indigenous adults in NYC (39%) had overweight, compared with two in seven Asian/Pacific Islander adults (28%); 27% of adults Indigenous to the Americas (27%) had obesity, three times the prevalence among Asian/Pacific Islander adults (8%). Overall, 34% of NYC adults had overweight and 23% had obesity during the same time period.

Adult Indigenous peoples living in NYC were twice as likely as White adults to have ever been told by a health provider that they had diabetes (15% vs. 7%). About 11% of NYC adults overall had diabetes.

One-third of Indigenous adults in NYC had ever been told that they had high blood pressure, a higher prevalence than among Asian/Pacific Islander and White adults (33% vs. 23% both A/PI and White) and among all adults (28%).

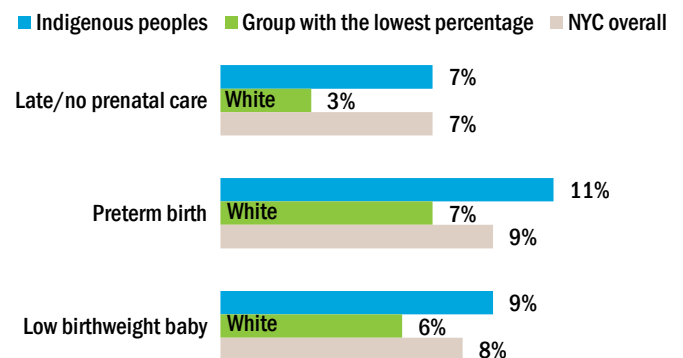
### Pregnancy outcomes in New York City

Access to prenatal care is critical to the health of our youngest New Yorkers. In 2013-2017, a higher proportion of infants born in NYC to an Indigenous birthing parent received late (third trimester) or no prenatal care, compared with infants born to a White birthing parent (7% vs. 3%).

Among infants born in NYC to an Indigenous birthing parent, 11% were preterm (born earlier than 37 weeks), a higher proportion than among those born to a White birthing parent (7%).

Similarly, in 2013-2017, 9% of infants born in NYC to an Indigenous birthing parent were low birthweight (less than 2,500 grams), a higher proportion than those born to a White birthing parent (6%).

#### Pregnancy outcomes among birthing parents who are Indigenous peoples of the Americas living in New York City, 2013-2017



An Indigenous birthing parent includes those identified on the birth certificate as American Indian/Alaska Native either alone or in combination with other races and/or Latino/a ethnicity. "White" group includes non-Latinos/as identified as only one race. *Source: NYC DOHMH Bureau of Vital Statistics, 2013-2017; data are age-adjusted*

**"The first [pregnancy] it was a challenge [to seek medical attention]. Because I didn't know what the process was. I didn't know anything... but little by little I was learning. When my [second child] was born it was a little bit easier."**  
 – Mam Maya New Yorker speaking about having children in NYC.<sup>6</sup>

## Limitations and implications

This report highlights the unique health-related successes, challenges, and inequities experienced by Indigenous peoples of the Americas in NYC. Across several measures of social and economic determinants of health, health behaviors, and health outcomes, the results show inequities between Indigenous peoples of the Americas and New Yorkers who are White. Compared with their White counterparts, Indigenous peoples of the Americas in NYC are less likely to have a high level of educational attainment and are more likely to experience poverty and unemployment. Access to health care was also more limited among Indigenous peoples of the Americas compared with White New Yorkers, with a higher proportion of Indigenous peoples reporting they did not have health insurance or a personal care provider and were not able to get needed medical care or did not receive prenatal care. The prevalence of health-related behaviors such as fruit and vegetable consumption and exercise were similar between Indigenous peoples of the Americas and the NYC average, with no other racial/ethnic group having a higher prevalence (although some had a lower prevalence); the prevalence of alcohol use and of cigarette

smoking, however, was higher compared with other groups (Latinos/as had the lowest prevalence of cigarette smoking and Asian/Pacific Islanders the lowest prevalence of heavy or binge drinking). Chronic conditions such as high blood pressure and diabetes were also more likely to be reported by Indigenous peoples of the Americas in NYC than other racial/ethnic groups – both conditions were more prevalent than among White New Yorkers and high blood pressure was equally more prevalent than among Asian/Pacific Islander adults.

A strength of this report is the collaboration between the NYC Health Department and community members who are intended to be represented in the data presented in the report. This report represents an initial attempt to institutionalize methodologies that include shared decision-making with people with first-hand experiential knowledge and that work with community members to examine local data, an essential approach to countering systemic injustices.<sup>31</sup> Furthermore, workgroup discussions were held with interpretation in Spanish and English to engage all participants, although for some, the colonial language was not their primary or preferred language of communication, underscoring the need for continued refinement

and improvement in community engagement with Indigenous peoples of the Americas in NYC.

These findings point to areas of concern and potential intervention related to the health of Indigenous peoples of the Americas living in NYC. However, available data are limited by several factors. Historic and present-day experiences of cultural and economic oppression, racism, and anti-immigrant and linguistic bias may deter residents from participating in the very surveys meant to ensure they are represented in order to provide important information to help serve their needs. In addition, methods of data collection are steeped in colonialism;<sup>32</sup> the language used to inquire about race (American Indian/Alaska Native) does not reflect the terms that people use for themselves and is perceived as offensive to some. Nor does the current terminology capture the breadth of the group intended to be represented; for example, Mexican, Central, and South Americans of Indigenous origin are often unfamiliar with U.S. racial categories so they may select the “Other” category.<sup>33</sup> The current methods used by the Census, the NYC Health Department, and others likely undercount Indigenous peoples of the Americas. This has important implications when inequities in health by race are addressed or

<sup>31</sup> James RD, West KM, Claw KG, et al. Responsible Research With Urban American Indians and Alaska Natives. *Am J Public Health*. 2018; 108(12):1613:1616. DOI: [10.2105/AJPH.2018.304708](https://doi.org/10.2105/AJPH.2018.304708)

<sup>32</sup> Smith TW. *Decolonizing Methodologies: Research and Indigenous Peoples*. 2<sup>nd</sup> ed. Zed Books; 2012.

<sup>33</sup> Gabbard S, Kissam E, Glasnapp J, et al. Identifying Indigenous Mexican and Central American Immigrants in Survey Research. In Proceedings of the International Conference on Methods for Surveying and Enumerating Hard-to-Reach Populations. New Orleans, LA: American Statistical Association. 2012. Retrieved July 6, 2021. Available from [http://www.asasrms.org/Proceedings/H2R2012/Identifying\\_Indigenous\\_Mexicans\\_and\\_Central\\_Americans\\_in\\_Surveys.pdf](http://www.asasrms.org/Proceedings/H2R2012/Identifying_Indigenous_Mexicans_and_Central_Americans_in_Surveys.pdf)

economic opportunities by race are made available, as Indigenous peoples of the Americas are excluded from consideration.<sup>34</sup> The Health Department has implemented a change to the NYC Community Health Survey to expand the questionnaire response from “American Indian/Alaska Native” to “American Indian, Native, First Nations, Indigenous Peoples of the Americas, or Alaska Native” and to add a follow up question to identify tribal heritage or ancestry group (for example, Haudenosaunee or Nahua). This is a small but important step to begin to more fully represent New Yorkers Indigenous to the Americas in our population surveys.

The analysis presented in this report has other important limitations. The available data from the American Community Survey and the NYC Community Health Survey provide a limited view of the health of Indigenous peoples of the Americas living in NYC. Due to the small sample of Indigenous peoples of the Americas, we combined multiple years of data for more robust estimates, however this is limited to overall proportions; we are not able to reliably stratify further to understand if there are differences within the broad group of Indigenous peoples in NYC (for example, by heritage group, by nativity, or by language spoken). Additionally, the survey questions do not necessarily reflect those issues most relevant to Indigenous peoples, nor can they tell us why observed rates

and inequities occur. For example, there may be several reasons that Indigenous peoples do not have health insurance, including legal immigration status or inability to locate practitioners that provide traditional medicine. We hope that these data can be a starting point to support Indigenous peoples to further investigate issues of importance to their communities.

NYC mortality data are also limited due to inaccurate reporting of indigenous race on the death certificate, leading to a significant underestimate of individuals classified as indigenous. Based on population estimates from the American Community Survey and considering the crude mortality rate for the rest of the population, we would expect to see about 600 deaths among New Yorkers identified as American Indian/Alaska Native (AI/AN) during the period 2013-2017. However, only 155 deaths were counted among AI/AN NYC residents. These results mirror other analyses.<sup>5</sup> Due to this underreporting of AI/AN race, we are not presenting mortality statistics in this report. The NYC Health Department is engaged in a quality improvement project to work with those who record information for death certification to improve the quality, including methods to improve the reporting of racial/ethnic classification. The quantitative data presented in this report provide a broad picture of the health of Indigenous peoples of the Americas in NYC. Increased qualitative data collection efforts through focus

groups and other methods would provide a more nuanced understanding of the strengths and challenges of the communities of Indigenous peoples of the Americas living in NYC. Descriptive data are needed to support program planning and funding applications, as well as to generate ideas for future research and policy changes to support the health of Indigenous peoples of the Americas in NYC. The collaboration between the NYC Health Department and members of several Indigenous communities highlighted data limitations as well as focused the analysis on issues of importance to the community. Building on this and previous collaborations, the NYC Health Department’s emergency response to the COVID-19 pandemic has included working closely with representatives of Indigenous communities in NYC to identify relief strategies, including linking community groups and members to support services, as well as implementing neighborhood-based responses to increase COVID-19 testing and vaccination. Additionally, for the first time in the Health Department’s recorded history, public health information about COVID-19 was released in languages Indigenous to the Americas. Local community leaders provided interpretation in 12 Indigenous languages for virtual community conversations about the COVID-19 vaccines. Currently, the Red de Pueblos Transnacionales has received a grant supported by the NYC Health Department to lead

<sup>34</sup> City of New York and MGT Consulting Group. City of New York Disparity Study. City of New York website. May 2018. Accessed December 16, 2019. <https://www1.nyc.gov/assets/mwbe/business/pdf/NYC-Disparity-Study-Report-final-published-May-2018.pdf>.



focused outreach in Indigenous languages for improving vaccination uptake and other social services in a priority neighborhood with high numbers of Indigenous migrants and people with lower vaccination rates. This outreach entails conducting tabling events, providing navigation services, and creating tailored messages through videos

and social media messages. These examples demonstrate the NYC Health Department’s commitment to community engagement and can serve as a model for continued collaborative work in NYC and in other urban centers. Improved data collection resulting from collaborations with community partners can support programs to address both

immediate needs related to COVID-19 as well as long-standing health inequities experienced by Indigenous peoples of the Americas. Applying committed shared-leadership approaches with community members can lead to better understanding of the inequities experienced and fundamental ways to respond to them.

**Data Sources:**

<sup>A</sup> **Integrated Public Use Microdata Series, U.S. Census American Community Survey (ACS) 2013-2017:** The ACS is an ongoing national survey conducted by the U.S. Census Bureau. The U.S. Census Bureau produces the PUMS files, compiled by University of Minnesota and downloadable at: [usa.ipums.org/usa/](http://usa.ipums.org/usa/). Citation: Steven Ruggles, Sarah Flood, Ronald Goeken, Josiah Grover, Erin Meyer, Jose Pacas, and Matthew Sobek. IPUMS USA: Version 9.0 [American Community Survey, 2013-2017]. Minneapolis, MN: University of Minnesota, 2019.

<sup>B</sup> **New York City Community Health Survey (CHS) 2013-2017:** conducted annually by the Department of Health and Mental Hygiene with approximately 10,000 adults aged 18 and older. Combined 2013-2017 data are age-adjusted to the US 2000 standard population. The CHS has included adults with landline phones since 2002 and adults who can be reached by cell phone starting in 2009. For more survey details, visit [nyc.gov/health/survey](http://nyc.gov/health/survey).

<sup>C</sup> **Birth data:** Bureau of Vital Statistics (BVS), 2013-2017: The NYC Health Department’s BVS maintains administrative data on all births in NYC and information was obtained from birth certificates.

**Contextual quotes:** Sourced from the report “Surveying Indigenous Latin American Languages in NYC” (see footnote 6 for full citation) and discussion notes from meetings with the Indigenous peoples of the Americas Epi Research Report workgroup.

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- Garifuna Coalition: Rosita Alvarez;
- Kichwa Nation: Fabián Muenala Pineda;
- Nacion Shuar en Nueva York: Lino Wamputsrík;
- NYC Health Department: Thelma Carrillo, William Carson (former), Aldo Crossa, Kinjia Hinterland, Krystal Reyes (former), Olivia Trieu (former);
- Red de Pueblos Transnacionales and Ti Toro Miko: Saul Quizet Rivera



# Epi Research Report Data Tables

## Health of Indigenous Peoples of the Americas Living in New York City

### Data Appendix

- Appendix 1.** Social and economic conditions by race/ethnicity, New York City, 2013-2017
  
- Appendix 2.** Prevalence of health care access, screenings, and vaccination among adults by race/ethnicity, New York City, 2013-2017
  
- Appendix 3.** Prevalence of health behaviors among adults by race/ethnicity, New York City, 2013-2017
  
- Appendix 4.** Prevalence of health conditions among adults by race/ethnicity, New York City, 2013-2017
  
- Appendix 5.** Birth outcomes by birthing parent's race/ethnicity, New York City, 2013-2017
  
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**Appendix 1. Social and economic conditions by race/ethnicity,<sup>§</sup> New York City, 2013-2017**

Source: American Community Survey, 2013-2017

		Percent	Lower 95% Confidence Interval	Upper 95% Confidence Interval	p-value <sup>^</sup>
<b>Education (four levels)<sup>1</sup></b>					
<b>Less than high school</b>	NYC Overall	19.3	19.1	19.6	<b>&lt;0.001</b>
	Indigenous peoples of the Americas	26.1	23.3	29.2	ref
	White	7.4	7.2	7.6	<b>&lt;0.001</b>
	Black	17.2	16.8	17.7	<b>&lt;0.001</b>
	Latino/a	34.1	33.6	34.7	<b>&lt;0.001</b>
	Asian/Pacific Islander	24.8	24.1	25.5	<b>&lt;0.001</b>
	Other/mixed race	19.7	18.1	21.4	0.877
<b>HS Diploma/GED</b>	NYC Overall	24.2	23.9	24.4	<b>0.003</b>
	Indigenous peoples of the Americas	20.7	18.4	23.3	ref
	White	19.3	18.9	19.6	0.687
	Black	31.5 <sup>U</sup>	31.0	32.0	<b>&lt;0.001</b>
	Latino/a	27.4	26.9	27.9	<b>&lt;0.001</b>
	Asian/Pacific Islander	19.3	18.7	19.9	0.467
	Other/mixed race	26.1	24.5	27.8	0.052
<b>Some college</b>	NYC Overall	20.4	20.2	20.6	<b>&lt;0.001</b>
	Indigenous peoples of the Americas	26.5 <sup>U</sup>	24.0	29.1	ref
	White	16.9	16.6	17.3	<b>&lt;0.001</b>
	Black	28.0	27.5	28.4	0.167
	Latino/a	21.7	21.3	22.2	<b>&lt;0.001</b>
	Asian/Pacific Islander	14.9	14.4	15.4	<b>&lt;0.001</b>
	Other/mixed race	19.0	17.7	20.5	<b>&lt;0.001</b>
<b>College degree or higher education</b>	NYC Overall	36.1	35.8	36.4	<b>&lt;0.001</b>
	Indigenous peoples of the Americas	26.7	24.1	29.4	ref
	White	56.4	56.0	56.9	<b>&lt;0.001</b>
	Black	23.3	22.8	23.8	<b>0.023</b>
	Latino/a	16.8	16.4	17.3	<b>&lt;0.001</b>
	Asian/Pacific Islander	41.1	40.3	41.9	<b>&lt;0.001</b>
	Other/mixed race	35.2	33.4	37.1	<b>&lt;0.001</b>
<b>Education (dichotomous)<sup>1</sup></b>					
<b>Less than high school</b>	NYC Overall	19.3	19.1	19.6	<b>&lt;0.001</b>
	Indigenous peoples of the Americas	26.1	23.3	29.2	ref
	White	7.4	7.2	7.6	<b>&lt;0.001</b>
	Black	17.2	16.8	17.7	<b>&lt;0.001</b>
	Latino/a	34.1	33.6	34.7	<b>&lt;0.001</b>
	Asian/Pacific Islander	24.8	24.1	25.5	<b>&lt;0.001</b>
	Other/mixed race	19.7	18.1	21.4	0.877
<b>HS Diploma/GED or higher education</b>	NYC Overall	80.7	80.4	80.9	<b>&lt;0.001</b>
	Indigenous peoples of the Americas	73.9	70.8	76.8	ref
	White	92.6	92.4	92.8	<b>&lt;0.001</b>
	Black	82.8	82.3	83.2	<b>&lt;0.001</b>
	Latino/a	65.9	65.3	66.5	<b>&lt;0.001</b>
	Asian/Pacific Islander	75.2	74.6	75.9	<b>&lt;0.001</b>
	Other/mixed race	80.3	78.6	81.9	0.877

Confidence Intervals (CIs) are a measure of estimate precision: the wider the CI, the more imprecise the estimate.

<sup>^</sup>Bold p-values indicate a statistically significant difference from the reference group at the p<0.05 level. T-tests were conducted to test differences between racial/ethnic groups; Z-tests were used to compare prevalence among Indigenous peoples in NYC to the citywide average.<sup>§</sup> Respondents who indicated race as American Indian/Alaska Native either alone or in combination with another race, multiple races, and or Latino/a ethnicity were classified as Indigenous peoples; respondents who indicated Asian/Pacific Islander, Black, or White race alone (single race) were classified as those single races; respondents who indicated Hispanic or Latino/a ethnicity were classified as Latino/a, regardless of selected race or races except those who indicated American Indian/Alaska Native heritage (included in the Indigenous peoples group); respondents who indicated another race or more than one race other than American Indian/Alaska Native and did not indicate Latino/a ethnicity were classified as other or mixed race.

1. Educational attainment is among adults 25 years or older. U When reporting to nearest whole percent, round up.

**Appendix 1 (continued). Social and economic conditions by race/ethnicity,<sup>§</sup> New York City, 2013-2017**

Source: American Community Survey, 2013-2017

		Percent	Lower 95% Confidence Interval	Upper 95% Confidence Interval	p-value <sup>^</sup>
<b>Limited English-speaking household<sup>2</sup></b>					
	NYC Overall	13.6	13.3	13.8	0.056
	Indigenous peoples of the Americas	10.9	8.9	13.3	ref
	White	7.1	6.8	7.4	<b>0.001</b>
	Black	2.6	2.4	2.9	<b>0.000</b>
	Latino/a	22.2	21.6	22.9	<b>0.000</b>
	Asian/Pacific Islander	30.0	29.1	30.9	<b>0.000</b>
	Other/mixed race	6.5 <sup>D</sup>	5.4	7.8	<b>0.001</b>
<b>Language proficiency<sup>3</sup></b>					
<b>Speak English less than "very well"</b>	NYC Overall	23.0	22.8	23.3	0.309
	Indigenous peoples of the Americas	21.6	18.9	24.5	ref
	White	12.0	11.7	12.3	<b>0.000</b>
	Black	5.4	2.1	5.7	<b>0.000</b>
	Latino/a	38.4	37.9	39.0	<b>0.000</b>
	Asian/Pacific Islander	48.1	47.3	48.8	<b>0.000</b>
	Other/mixed race	11.5 <sup>U</sup>	10.2	12.9	<b>0.000</b>
<b>Household poverty</b>					
<b>Income less than 200% of the Federal Poverty Level</b>	NYC Overall	40.6	40.2	40.9	<b>0.001</b>
	Indigenous peoples of the Americas	46.5 <sup>U</sup>	42.9	50.2	ref
	White	25.6	25.1	26.1	<b>&lt;0.001</b>
	Black	43.3	42.5	44.0	0.086
	Latino/a	54.9	54.1	55.6	<b>&lt;0.001</b>
	Asian/Pacific Islander	42.3	41.3	43.2	<b>0.027</b>
	Other/mixed race	35.2	33.2	37.4	<b>&lt;0.001</b>
<b>Income greater than or equal to 200% of the Federal Poverty Level</b>	NYC Overall	59.4	59.1	59.8	<b>0.001</b>
	Indigenous peoples of the Americas	53.5 <sup>D</sup>	49.8	57.1	ref
	White	74.4	73.9	74.9	<b>&lt;0.001</b>
	Black	56.8	56.0	57.5	0.086
	Latino/a	45.1	44.4	45.9	<b>&lt;0.001</b>
	Asian/Pacific Islander	57.7	56.8	58.7	<b>0.027</b>
	Other/mixed race	64.8	62.7	66.9	<b>&lt;0.001</b>
	Other/mixed race	50.8	47.8	53.8	0.324

Confidence Intervals (CIs) are a measure of estimate precision: the wider the CI, the more imprecise the estimate.

<sup>^</sup>Bold p-values indicate a statistically significant difference from the reference group at the p<0.05 level. T-tests were conducted to test differences between racial/ethnic groups; Z-tests were used to compare prevalence among Indigenous peoples in NYC to the citywide average.<sup>§</sup> Respondents who indicated race as American Indian/Alaska Native either alone or in combination with another race, multiple races, and or Latino/a ethnicity were classified as Indigenous peoples; respondents who indicated Asian/Pacific Islander, Black, or White race alone (single race) were classified as those single races; respondents who indicated Hispanic or Latino/a ethnicity were classified as Latino/a, regardless of selected race or races except those who indicated American Indian/Alaska Native heritage (included in the Indigenous peoples group); respondents who indicated another race or more than one race other than American Indian/Alaska Native and did not indicate Latino/a ethnicity were classified as other or mixed race.

2. Limited English-speaking households are those in which all members 14 years old and older have at least some difficulty with English.

3. English language proficiency is among persons 5 years or older.

D When reporting to nearest whole percent, round down. U When reporting to nearest whole percent, round up.

**Appendix 1 (continued). Social and economic conditions by race/ethnicity,<sup>5</sup> New York City, 2013-2017**

Source: American Community Survey, 2013-2017

		Percent	Lower 95% Confidence Interval	Upper 95% Confidence Interval	p-value <sup>^</sup>
<b>Employment<sup>4</sup></b>					
<b>Employed</b>	NYC Overall	91.5 <sup>U</sup>	91.4	91.7	<b>0.003</b>
	Indigenous peoples of the Americas	88.1	85.8	90.1	ref
	White	94.6	94.4	94.8	<b>&lt;0.001</b>
	Black	87.8	87.4	88.2	0.735
	Latino/a	89.7	89.3	90.1	0.465
	Asian/Pacific Islander	93.3	92.9	93.6	<b>&lt;0.001</b>
	Other/mixed race	91.0	89.9	92.0	0.948
<b>Not employed</b>	NYC Overall	8.5 <sup>D</sup>	8.3	8.7	<b>0.006</b>
	Indigenous peoples of the Americas	11.9	9.9	14.2	ref
	White	5.4	5.2	5.6	<b>&lt;0.001</b>
	Black	12.2	11.8	12.6	0.857
	Latino/a	10.3	9.9	10.7	0.085
	Asian/Pacific Islander	6.8	6.4	7.1	<b>&lt;0.001</b>
	Other/mixed race	9.0	8.0	10.1	<b>0.011</b>
<b>Rent burden</b>					
<b>Rent equal to or greater than 30% of household income</b>	NYC Overall	51.3	50.8	51.8	0.345
	Indigenous peoples of the Americas	53.7	48.7	58.6	ref
	White	43.8	43.0	44.7	<b>&lt;0.001</b>
	Black	50.6	49.6	51.6	0.232
	Latino/a	55.8	54.9	56.7	0.422
	Asian/Pacific Islander	55.5 <sup>U</sup>	54.1	56.9	0.488
	Other/mixed race	50.8	47.8	53.8	0.324

Confidence Intervals (CIs) are a measure of estimate precision: the wider the CI, the more imprecise the estimate.

<sup>^</sup>Bold p-values indicate a statistically significant difference from the reference group at the p<0.05 level. T-tests were conducted to test differences between racial/ethnic groups; Z-tests were used to compare prevalence among Indigenous peoples in NYC to the citywide average.

<sup>§</sup> Respondents who indicated race as American Indian/Alaska Native either alone or in combination with another race, multiple races, and or Latino/a ethnicity were classified as Indigenous peoples; respondents who indicated Asian/Pacific Islander, Black, or White race alone (single race) were classified as those single races; respondents who indicated Hispanic or Latino/a ethnicity were classified as Latino/a, regardless of selected race or races except those who indicated American Indian/Alaska Native heritage (included in the Indigenous peoples group); respondents who indicated another race or more than one race other than American Indian/Alaska Native and did not indicate Latino/a ethnicity were classified as other or mixed race.

4. Employment is among adults 16 years or older in the workforce.

D When reporting to nearest whole percent, round down. U When reporting to nearest whole percent, round up.



**Appendix 2. Prevalence of health care access, screenings, and vaccination among adults by race/ethnicity,<sup>§</sup> New York City, 2013-2017**

Source: NYC Community Health Survey, 2013-2017.

2013-2017 combined years analyses are weighted to the NYC adult residential population as per the 2014 American Community Survey. Data are age adjusted to the 2000 US Standard Population.

Data represent adults 18 and older except colonoscopy screening (50 and older)

	Percent	Lower 95% Confidence Interval	Upper 95% Confidence Interval	p-value <sup>^</sup>
<b>Did not have health insurance</b>				
NYC Overall	13.7	13.3	14.2	<b>0.002</b>
Indigenous peoples of the Americas	19.2	15.7	23.2	ref
White	6.8	6.1	7.5	<b>&lt;0.001</b>
Black	13.2	12.3	14.2	<b>0.002</b>
Latino/a	23.0	22.0	24.0	0.053
Asian/Pacific Islander	13.6	12.5	14.8	<b>0.005</b>
Other/mixed race	7.0	4.9	9.9	<b>&lt;0.001</b>
<b>Did not have a personal doctor or health care provider</b>				
NYC Overall	16.6	16.1	17.1	0.063
Indigenous peoples of the Americas	19.5 <sup>D</sup>	16.1	23.3	ref
White	12.5 <sup>U</sup>	11.7	13.4	<b>&lt;0.001</b>
Black	13.9	12.9	14.9	<b>0.004</b>
Latino/a	24.0	23.0	25.0	<b>0.018</b>
Asian/Pacific Islander	16.4	15.2	17.7	0.120
Other/mixed race	13.1	10.0	17.2	<b>0.015</b>
<b>Did not get needed medical care in the past 12 months</b>				
NYC Overall	10.2	9.9	10.6	<b>0.001</b>
Indigenous peoples of the Americas	16.2	12.9	20.2	ref
White	8.5 <sup>D</sup>	7.8	9.2	<b>&lt;0.001</b>
Black	10.7	10.0	11.6	<b>0.004</b>
Latino/a	12.6	11.9	13.5	0.057
Asian/Pacific Islander	9.2	8.2	10.4	<b>&lt;0.001</b>
Other/mixed race	12.2	9.3	15.9	0.106

Confidence Intervals (CIs) are a measure of estimate precision: the wider the CI, the more imprecise the estimate.

<sup>^</sup> Bold p-values indicate a statistically significant difference from the reference group at the p<0.05 level. T-tests were conducted to test differences between racial/ethnic groups; Z-tests were used to compare prevalence among Indigenous peoples in NYC to the citywide average.

<sup>§</sup> Respondents who indicated race as American Indian/Alaska Native either alone or in combination with another race, multiple races, and or Latino/a ethnicity were classified as Indigenous peoples; respondents who indicated Asian/Pacific Islander, Black, or White race alone (single race) were classified as those single races; respondents who indicated Hispanic or Latino/a ethnicity were classified as Latino/a, regardless of selected race or races except those who indicated American Indian/Alaska Native heritage (included in the Indigenous peoples group); respondents who indicated another race or more than one race other than American Indian/Alaska Native and did not indicate Latino/a ethnicity were classified as other or mixed race.

<sup>D</sup> When reporting to nearest whole percent, round down. <sup>U</sup> When reporting to nearest whole percent, round up.

**Appendix 2 (continued). Prevalence of health care access, screenings, and vaccination among adults by race/ethnicity,<sup>§</sup> New York City, 2013-2017**

Source: NYC Community Health Survey, 2013-2017.

2013-2017 combined years analyses are weighted to the NYC adult residential population as per the 2014 American Community Survey.

Data are age adjusted to the 2000 US Standard Population.

Data represent adults 18 and older except colonoscopy screening (50 and older)

	Percent	Lower 95% Confidence Interval	Upper 95% Confidence Interval	p-value <sup>^</sup>
<b>Tested for HIV in past 12 months</b>				
NYC Overall	33.1	32.5	33.7	<0.001
Indigenous peoples of the Americas	41.4	37.1	45.8	ref
White	19.8	18.8	20.9	<0.001
Black	48.1	46.8	49.4	0.004
Latino/a	46.4	45.2	47.5	0.030
Asian/Pacific Islander	17.5 <sup>U</sup>	16.3	18.9	<0.001
Other/mixed race	36.8	31.9	42.0	0.177
<b>Flu shot in the past 12 months</b>				
NYC Overall	42.8	42.2	43.4	0.152
Indigenous peoples of the Americas	40.6	36.5	44.8	ref
White	43.1	41.9	44.3	0.265
Black	39.0	37.7	40.3	0.470
Latino/a	44.0	42.8	45.1	0.127
Asian/Pacific Islander	46.3	44.6	48.0	0.013
Other/mixed race	37.0	31.9	42.3	0.291
<b>Timely colonoscopy (within past 10 years among 50+)</b>				
NYC Overall	69.2	68.4	70.1	0.293
Indigenous peoples of the Americas	67.5 <sup>U</sup>	61.3	73.2	ref
White	69.2	67.8	70.5	0.608
Black	70.0	68.2	71.9	0.435
Latino/a	71.8	70.1	73.5	0.177
Asian/Pacific Islander	63.9	61.0	66.7	0.283
Other/mixed race	68.2	58.1	76.9	0.907

Confidence Intervals (CIs) are a measure of estimate precision: the wider the CI, the more imprecise the estimate.

<sup>^</sup> Bold p-values indicate a statistically significant difference from the reference group at the p<0.05 level. T-tests were conducted to test differences between racial/ethnic groups; Z-tests were used to compare prevalence among Indigenous peoples in NYC to the citywide average.<sup>§</sup> Respondents who indicated race as American Indian/Alaska Native either alone or in combination with another race, multiple races, and or Latino/a ethnicity were classified as Indigenous peoples; respondents who indicated Asian/Pacific Islander, Black, or White race alone (single race) were classified as those single races; respondents who indicated Hispanic or Latino/a ethnicity were classified as Latino/a, regardless of selected race or races except those who indicated American Indian/Alaska Native heritage (included in the Indigenous peoples group); respondents who indicated another race or more than one race other than American Indian/Alaska Native and did not indicate Latino/a ethnicity were classified as other or mixed race.

D When reporting to nearest whole percent, round down. U When reporting to nearest whole percent, round up.

**Appendix 3. Prevalence of health behaviors among adults by race/ethnicity,<sup>§</sup> New York City, 2013-2017**

Source: NYC Community Health Survey, 2013-2017.

2013-2015 combined years analyses are weighted to the NYC adult residential population as per the 2014 American Community Survey.

Data are age adjusted to the 2000 US Standard Population.

Data represent adults 18 and older

	Percent	Lower 95% Confidence Interval	Upper 95% Confidence Interval	p-value <sup>^</sup>
<b>Physical activity (any exercise in the past 30 days)</b>				
NYC Overall	74.1	73.5	74.6	0.028
Indigenous peoples of the Americas	77.6	73.9	80.9	ref
White	78.7	77.7	79.6	0.557
Black	73.8	72.6	74.9	<b>0.045</b>
Latino/a	71.7	70.6	72.7	<b>0.002</b>
Asian/Pacific Islander	68.5 <sup>U</sup>	66.9	70.1	<b>&lt;0.001</b>
Other/mixed race	76.9	72.0	81.2	0.824
<b>Cigarette smoking</b>				
<b>Current smoking</b>				
NYC Overall	14.1	13.6	14.5	<b>0.031</b>
Indigenous peoples of the Americas	17.4	14.2	21.2	ref
White	15.6	14.7	16.6	0.321
Black	14.5 <sup>U</sup>	13.6	15.5	0.113
Latino/a	12.4	11.7	13.2	<b>0.006</b>
Asian/Pacific Islander	13.4	12.4	14.5	<b>0.031</b>
Other	13.7	10.6	17.6	0.143
<b>Former smoking</b>				
NYC Overall	19.3	18.8	19.7	0.379
Indigenous peoples of the Americas	19.8	16.4	23.8	ref
White	26.6	25.7	27.6	<b>&lt;0.001</b>
Black	13.5 <sup>D</sup>	12.7	14.3	<b>0.001</b>
Latino/a	16.5 <sup>U</sup>	15.7	17.4	<b>0.086</b>
Asian/Pacific Islander	11.3	10.3	12.4	<b>&lt;0.001</b>
Other	19.5 <sup>U</sup>	14.7	25.4	0.925
<b>Never smoked</b>				
NYC Overall	66.7	66.1	67.2	<b>0.042</b>
Indigenous peoples of the Americas	62.7	58.2	67.0	ref
White	57.8	56.6	58.9	<b>0.033</b>
Black	72.0	70.8	73.1	<b>&lt;0.001</b>
Latino/a	71.0	70.0	72.1	<b>&lt;0.001</b>
Asian/Pacific Islander	75.3	73.8	76.7	<b>&lt;0.001</b>
Other	66.7	60.9	72.1	0.270

Confidence Intervals (CIs) are a measure of estimate precision: the wider the CI, the more imprecise the estimate.

<sup>^</sup> Bold p-values indicate a statistically significant difference from the reference group at the p<0.05 level. T-tests were conducted to test differences between racial/ethnic groups; Z-tests were used to compare prevalence among Indigenous peoples in NYC to the citywide average.

<sup>§</sup> Respondents who indicated race as American Indian/Alaska Native either alone or in combination with another race, multiple races, and/or Latino/a ethnicity were classified as Indigenous peoples; respondents who indicated Asian/Pacific Islander, Black, or White race alone (single race) were classified as those single races; respondents who indicated Hispanic or Latino/a ethnicity were classified as Latino/a, regardless of selected race or races except those who indicated American Indian/Alaska Native heritage (included in the Indigenous peoples group); respondents who indicated another race or more than one race other than American Indian/Alaska Native and did not indicate Latino/a ethnicity were classified as other or mixed race.

<sup>D</sup> When reporting to nearest whole percent, round down. <sup>U</sup> When reporting to nearest whole percent, round up.

**Appendix 3 (continued). Prevalence of health behaviors among adults by race/ethnicity,<sup>§</sup> New York City, 2013-2017**

Source: NYC Community Health Survey, 2013-2017.

2013-2015 combined years analyses are weighted to the NYC adult residential population as per the 2014 American Community Survey.

Data are age adjusted to the 2000 US Standard Population.

Data represent adults 18 and older

	Percent	Lower 95% Confidence Interval	Upper 95% Confidence Interval	p-value <sup>^</sup>
<b>Current drinking<sup>1</sup></b>				
NYC Overall	55.4	54.8	56.0	0.214
Indigenous peoples of the Americas	53.6	49.0	58.1	ref
White	68.0	66.9	69.1	<b>&lt;0.001</b>
Black	51.1	49.8	52.4	0.312
Latino/a	48.9	47.8	50.1	0.054
Asian/Pacific Islander	37.7	36.1	39.4	<b>&lt;0.001</b>
Other	62.7	57.0	68.0	<b>0.012</b>
<b>Heavy drinking<sup>2</sup></b>				
NYC Overall	5.3	5.0	5.6	0.068
Indigenous peoples of the Americas	7.1	5.1	9.8	ref
White	8.2	7.4	9.0	0.394
Black	3.9	3.4	4.5	<b>0.011</b>
Latino/a	4.0	3.6	4.4	<b>0.011</b>
Asian/Pacific Islander	2.6	2.0	3.3	<b>&lt;0.001</b>
Other/mixed race	5.7	3.7	8.5	0.398
<b>Binge drinking<sup>3</sup></b>				
NYC Overall	17.3	16.8	17.8	0.266
Indigenous peoples of the Americas	18.5 <sup>U</sup>	15.0	22.7	ref
White	23.2	22.2	24.4	<b>0.020</b>
Black	13.3	12.4	14.2	<b>0.008</b>
Latino/a	17.7	16.8	18.6	0.669
Asian/Pacific Islander	9.3	8.4	10.4	<b>&lt;0.001</b>
Other/mixed race	22.5 <sup>D</sup>	17.5	28.3	0.246

Confidence Intervals (CIs) are a measure of estimate precision: the wider the CI, the more imprecise the estimate.

<sup>^</sup> Bold p-values indicate a statistically significant difference from the reference group at the p<0.05 level. T-tests were conducted to test differences between racial/ethnic groups; Z-tests were used to compare prevalence among Indigenous peoples in NYC to the citywide average.

<sup>§</sup> Respondents who indicated race as American Indian/Alaska Native either alone or in combination with another race, multiple races, and or Latino/a ethnicity were classified as Indigenous peoples; respondents who indicated Asian/Pacific Islander, Black, or White race alone (single race) were classified as those single races; respondents who indicated Hispanic or Latino/a ethnicity were classified as Latino/a, regardless of selected race or races except those who indicated American Indian/Alaska Native heritage (included in the Indigenous peoples group); respondents who indicated another race or more than one race other than American Indian/Alaska Native and did not indicate Latino/a ethnicity were classified as other or mixed race.

1. Current drinker is defined as having consumed at least one alcoholic drink during the past 30 days.

2. Heavy drinker is defined as having consumed > 2 alcoholic drinks per day for men or consumed > 1 alcoholic drink per day for women during the past 30 days.

3. Binge drinker is defined as having consumed 5 or more alcoholic drinks for men on one occasion and 4 or more alcoholic drinks for women during the past 30 days.

D When reporting to nearest whole percent, round down. U When reporting to nearest whole percent, round up.

**Appendix 3 (continued). Prevalence of health behaviors among adults by race/ethnicity,<sup>§</sup> New York City, 2013-2017**

Source: NYC Community Health Survey, 2013-2017.

2013-2015 combined years analyses are weighted to the NYC adult residential population as per the 2014 American Community Survey.

Data are age adjusted to the 2000 US Standard Population.

Data represent adults 18 and older

		Percent	Lower 95% Confidence Interval	Upper 95% Confidence Interval	p-value <sup>^</sup>
<b>Fruit and vegetable consumption</b>					
<b>Less than 5 servings per day</b>	NYC Overall	88.9	88.5	89.3	0.061
	Indigenous peoples of the Americas	85.9	81.7	89.3	ref
	White	82.9	82.0	83.9	0.135
	Black	92.6	92.0	93.3	<b>0.001</b>
	Latino/a	94.3	93.7	94.8	<b>&lt;0.001</b>
	Asian/Pacific Islander	89.2	88.1	90.2	0.103
	Other/mixed race	84.4	78.6	88.9	0.644
<b>5 or more servings per day</b>	NYC Overall	11.1	10.7	11.5	0.061
	Indigenous peoples of the Americas	14.1	10.7	18.3	ref
	White	17.1	16.1	18.0	0.135
	Black	7.4	6.7	8.0	<b>0.001</b>
	Latino/a	5.7	5.2	6.3	<b>&lt;0.001</b>
	Asian/Pacific Islander	10.8	9.8	11.9	0.103
	Other/mixed race	15.6	11.1	21.4	0.644
<b>Sugary drink consumption (average day)</b>					
<b>None</b>	NYC Overall	44.4	43.8	45.0	<b>0.011</b>
	Indigenous peoples of the Americas	39.1	34.7	43.6	ref
	White	53.5 <sup>D</sup>	52.3	54.6	<b>&lt;0.001</b>
	Black	31.8	30.6	33.0	<b>0.002</b>
	Latino/a	38.5 <sup>D</sup>	37.4	39.6	0.796
	Asian/Pacific Islander	53.4	51.8	54.9	<b>&lt;0.001</b>
	Other/mixed race	44.1	38.6	49.8	0.170
<b>Less than one per day</b>	NYC Overall	32.6	32.0	33.2	0.299
	Indigenous peoples of the Americas	33.9	29.5	38.5	ref
	White	31.0	29.8	32.2	0.225
	Black	35.3	34.0	36.6	0.547
	Latino/a	32.9	31.8	34.0	0.680
	Asian/Pacific Islander	32.2	30.7	33.8	0.502
	Other/mixed race	37.6	32.4	43.2	0.297
<b>One or more per day</b>	NYC Overall	23.0	22.5	23.5	<b>0.023</b>
	Indigenous peoples of the Americas	27.0	23.3	31.2	ref
	White	15.6	14.7	16.5	<b>&lt;0.001</b>
	Black	32.9	31.6	34.2	<b>0.006</b>
	Latino/a	28.6	27.6	29.7	0.446
	Asian/Pacific Islander	14.4	13.2	15.6	<b>&lt;0.001</b>
	Other/mixed race	18.3	14.6	22.6	<b>0.002</b>

Confidence Intervals (CIs) are a measure of estimate precision: the wider the CI, the more imprecise the estimate.

<sup>^</sup> Bold p-values indicate a statistically significant difference from the reference group at the p<0.05 level. T-tests were conducted to test differences between racial/ethnic groups; Z-tests were used to compare prevalence among Indigenous peoples in NYC to the citywide average.

<sup>§</sup> Respondents who indicated race as American Indian/Alaska Native either alone or in combination with another race, multiple races, and or Latino/a ethnicity were classified as Indigenous peoples; respondents who indicated Asian/Pacific Islander, Black, or White race alone (single race) were classified as those single races; respondents who indicated Hispanic or Latino/a ethnicity were classified as Latino/a, regardless of selected race or races except those who indicated American Indian/Alaska Native heritage (included in the Indigenous peoples group); respondents who indicated another race or more than one race other than American Indian/Alaska Native and did not indicate Latino/a ethnicity were classified as other or mixed race.

<sup>D</sup> When reporting to nearest whole percent, round down. <sup>U</sup> When reporting to nearest whole percent, round up.



**Appendix 4. Prevalence of health conditions among adults by race/ethnicity,<sup>§</sup> New York City, 2013-2017**

Source: NYC Community Health Survey, 2013-2017.

2013-2017 combined years analyses are weighted to the NYC adult residential population as per the 2014 American Community Survey.

Data are age adjusted to the 2000 US Standard Population.

Data represent adults 18 and older.

		Percent	Lower 95% Confidence Interval	Upper 95% Confidence Interval	p-value <sup>^</sup>
<b>Self-reported health status</b>					
<b>Excellent/ Very good/Good</b>	<b>NYC Overall</b>	77.6	77.1	78.1	<b>0.003</b>
	Indigenous peoples of the Americas	71.6	67.1	75.7	ref
	White	85.8	85.1	86.5	<b>&lt;0.001</b>
	Black	80.4	79.3	81.4	<b>&lt;0.001</b>
	Latino/a	67.7	66.6	68.7	0.086
	Asian/Pacific Islander	66.8	65.3	68.3	<b>0.042</b>
	Other/mixed race	82.3	78.0	85.9	<b>&lt;0.001</b>
	<b>Fair/Poor</b>	<b>NYC Overall</b>	22.4	21.9	22.9
Indigenous peoples of the Americas		28.4	24.3	32.9	ref
White		14.2	13.5	14.9	<b>&lt;0.001</b>
Black		19.6	18.6	20.7	<b>&lt;0.001</b>
Latino/a		32.3	31.3	33.4	0.086
Asian/Pacific Islander		33.2	31.7	34.7	<b>0.042</b>
Other/mixed race		17.7	14.1	22.0	<b>&lt;0.001</b>
<b>High blood pressure<sup>1</sup></b>					
	<b>NYC Overall</b>	28.3	27.8	28.8	<b>0.004</b>
	Indigenous peoples of the Americas	33.0	29.6	36.7	ref
	White	23.3	22.5	24.2	<b>&lt;0.001</b>
	Black	35.5 <sup>U</sup>	34.5	36.6	0.185
	Latino/a	32.3	31.3	33.3	0.680
	Asian/Pacific Islander	23.3	22.0	24.7	<b>&lt;0.001</b>
	Other/mixed race	27.0	22.7	31.8	<b>0.039</b>
<b>Diabetes<sup>2</sup></b>					
	<b>NYC Overall</b>	11.2	10.8	11.5	<b>0.002</b>
	Indigenous peoples of the Americas	15.2	12.7	18.2	ref
	White	6.9	6.5	7.5	<b>&lt;0.001</b>
	Black	14.0	13.2	14.8	0.404
	Latino/a	15.8	15.0	16.6	0.703
	Asian/Pacific Islander	11.8	10.7	13.0	<b>0.023</b>
	Other/mixed race	12.7	9.6	16.7	0.279

Confidence Intervals (CIs) are a measure of estimate precision: the wider the CI, the more imprecise the estimate.

<sup>^</sup> Bold p-values indicate a statistically significant difference from the reference group at the p<0.05 level. T-tests were conducted to test differences between racial/ethnic groups; Z-tests were used to compare prevalence among Indigenous peoples in NYC to the citywide average.

<sup>§</sup> Respondents who indicated race as American Indian/Alaska Native either alone or in combination with another race, multiple races, and or Latino/a ethnicity were classified as Indigenous peoples; respondents who indicated Asian/Pacific Islander, Black, or White race alone (single race) were classified as those single races; respondents who indicated Hispanic or Latino/a ethnicity were classified as Latino/a, regardless of selected race or races except those who indicated American Indian/Alaska Native heritage (included in the Indigenous peoples group); respondents who indicated another race or more than one race other than American Indian/Alaska Native and did not indicate Latino/a ethnicity were classified as other or mixed race.

1. High blood pressure: respondent ever told by a doctor, nurse, or other health professional that respondent has hypertension or high blood pressure.

2. Diabetes: respondent ever told by a doctor, nurse, or other health professional that respondent has diabetes.

D When reporting to nearest whole percent, round down. U When reporting to nearest whole percent, round up.

**Appendix 4 (continued). Prevalence of health conditions among adults by race/ethnicity,<sup>§</sup> New York City, 2013-2017**

Source: NYC Community Health Survey, 2013-2017.

2013-2017 combined years analyses are weighted to the NYC adult residential population as per the 2014 American Community Survey.

Data are age adjusted to the 2000 US Standard Population.

Data represent adults 18 and older.

		Percent	Lower 95% Confidence Interval	Upper 95% Confidence Interval	p-value <sup>^</sup>
<b>Body mass index (BMI)</b>					
<b>Underweight (BMI &lt; 18.5)</b>	<b>NYC Overall</b>	3.1	2.9	3.4	<b>0.003</b>
	Indigenous peoples of the Americas	1.7	1.0	3.0	ref
	White	3.2	2.7	3.7	<b>0.008</b>
	Black	1.9	1.6	2.3	0.728
	Latino/a	2.1	1.8	2.6	0.432
	Asian/Pacific Islander	6.4	5.6	7.4	<b>&lt;0.001</b>
	Other/mixed race	4.3	2.5	7.3	<b>0.041</b>
<b>Normal (18.5 ≤ BMI &lt; 25)</b>	<b>NYC Overall</b>	39.9	39.3	40.6	<b>&lt;0.001</b>
	Indigenous peoples of the Americas	31.7	27.7	36.1	ref
	White	46.3	45.1	47.5	<b>&lt;0.001</b>
	Black	30.9	29.6	32.1	0.699
	Latino/a	30.3	29.2	31.4	0.529
	Asian/Pacific Islander	57.7	55.9	59.5	<b>&lt;0.001</b>
	Other/mixed race	44.2	39.1	49.5	<b>&lt;0.001</b>
<b>Overweight (25 ≤ BMI &lt; 30)</b>	<b>NYC Overall</b>	33.6	33.0	34.2	<b>0.006</b>
	Indigenous peoples of the Americas	39.5 <sup>D</sup>	35.0	44.1	ref
	White	32.2	31.0	33.3	<b>0.002</b>
	Black	35.0	33.7	36.3	0.066
	Latino/a	37.3	36.1	38.5	0.364
	Asian/Pacific Islander	28.2	26.6	29.8	<b>&lt;0.001</b>
	Other/mixed race	31.1	26.0	36.7	<b>0.020</b>
<b>Obesity (BMI ≥ 30)</b>	<b>NYC Overall</b>	23.3	22.8	23.9	<b>0.033</b>
	Indigenous peoples of the Americas	27.1	23.3	31.2	ref
	White	18.3	17.5	19.2	<b>&lt;0.001</b>
	Black	32.2	31.0	33.5	<b>0.014</b>
	Latino/a	30.2	29.1	31.4	0.128
	Asian/Pacific Islander	7.7	6.8	8.8	<b>&lt;0.001</b>
	Other/mixed race	20.4	16.2	25.3	<b>0.029</b>

Confidence Intervals (CIs) are a measure of estimate precision: the wider the CI, the more imprecise the estimate.

<sup>^</sup> Bold p-values indicate a statistically significant difference from the reference group at the p<0.05 level. T-tests were conducted to test differences between racial/ethnic groups; Z-tests were used to compare prevalence among Indigenous peoples in NYC to the citywide average.

<sup>§</sup> Respondents who indicated race as American Indian/Alaska Native either alone or in combination with another race, multiple races, and or Latino/a ethnicity were classified as Indigenous peoples; respondents who indicated Asian/Pacific Islander, Black, or White race alone (single race) were classified as those single races; respondents who indicated Hispanic or Latino/a ethnicity were classified as Latino/a, regardless of selected race or races except those who indicated American Indian/Alaska Native heritage (included in the Indigenous peoples group); respondents who indicated another race or more than one race other than American Indian/Alaska Native and did not indicate Latino/a ethnicity were classified as other or mixed race.

D When reporting to nearest whole percent, round down. U When reporting to nearest whole percent, round up.

Appendix 5. Birth outcomes by birthing parent's race/ethnicity,<sup>§</sup> New York City, 2013-2017

Source: NYC Dept of Health and Mental Hygiene Office of Vital Statistics, 2013-2017.

	Percentage of births	Count of births	Total number of live births	Lower 95% Confidence Interval	Upper 95% Confidence Interval	different from reference group <sup>^^</sup>
<b>Late or no prenatal care<sup>1</sup></b>						
<b>NYC Overall</b>	7.1%	38,976	547,237	7.1%	7.2%	~
Indigenous peoples of the Americas	7.4%	107	1,453	6.0%	8.7%	ref
Asian	6.1%	5,730	93,616	6.0%	6.3%	no
Black	13.2%	14,314	108,606	13.0%	13.4%	yes
Latino/a	7.6%	12,559	164,800	7.5%	7.7%	no
White	3.4%	5,801	172,160	3.3%	3.5%	yes
Other/mixed race	6.6%	406	6,180	6.0%	7.2%	no
Rest of NYC (total minus Indigenous)	7.1%	38,869	545,784	7.1%	7.2%	no
<b>Preterm births (born earlier than 37 weeks)</b>						
<b>NYC overall</b>	8.7%	47,761	547,237	8.7%	8.8%	~
Indigenous peoples of the Americas	10.5%	153	1,453	9.0%	12.1%	ref
Asian	7.8%	7,286	93,616	7.6%	8.0%	yes
Black	12.2%	13,220	108,606	12.0%	12.4%	no
Latino/a	9.1%	14,992	164,800	9.0%	9.2%	no
White	6.7%	11,477	172,160	6.5%	6.8%	yes
Other/mixed race	9.4%	578	6,180	8.6%	10.1%	no
Rest of NYC (total minus Indigenous)	8.7%	47,608	545,784	8.6%	8.8%	yes
<b>Low birthweight (less than 2,500 grams)</b>						
<b>NYC overall</b>	8.2%	44,982	547,237	8.1%	8.3%	~
Indigenous peoples of the Americas	9.5%	138	1,453	8.0%	11.0%	ref
Asian	8.2%	7,651	93,616	8.0%	8.3%	no
Black	12.1%	13,107	108,606	11.9%	12.3%	yes
Latino/a	7.9%	13,084	164,800	7.8%	8.1%	no
White	6.0%	10,329	172,160	5.9%	6.1%	yes
Other/mixed race	10.0%	618	6,180	9.3%	10.7%	yes
Rest of NYC (total minus Indigenous)	8.2%	44,844	545,784	8.1%	8.3%	no

<sup>^^</sup> A significant difference is assumed between birthing parents Indigenous to the Americas living in NYC and those of other racial/ethnic groups in NYC if the confidence intervals do not overlap.

<sup>1</sup> Late/no prenatal care is no care until the third trimester of pregnancy or at all before giving birth

<sup>§</sup> Birthing parents who indicated race as American Indian/Alaska Native, either alone or in combination with another race, multiple races, and or Latino/a ethnicity, were classified as Indigenous peoples; birthing parents who indicated Asian, Black or White race alone (single race) were classified as those single races; birthing parents who indicated Hispanic or Latino/a ethnicity were classified as Latino/a, regardless of selected race or races except those who indicated American Indian/Alaska Native heritage (included in the Indigenous peoples group); birthing parents who indicated another race or more than one race other than American Indian/Alaska Native were classified as other or mixed race.

Appendix 6) Indigenous languages of the Americas spoken in New York City

Snapshot maps provided by the Endangered Language Alliance. More information at: <https://languagemap.nyc/>.

**Yellow highlight** indicates languages of American Indians/First Nations/Indigenous peoples of the Americas spoken in NYC. These represent languages that have survived 529 years of colonization and forced assimilation.

Manhattan and Bronx



Queens





Brooklyn



Staten Island

