Essential every day: The lives of NYC's essential workforce during COVID-19

NYCHVS New York City Housing and Vacancy Survey





The New York City Housing and Vacancy Survey (NYCHVS) is the longest running housing survey in the US, conducted about every three years since 1965 by the U.S. Census Bureau on behalf of the City of New York. For more than 50 years, it has gathered key data on our city's housing supply, condition, and need.

But it does more than this: the NYCHVS tells the broader story of our city and bears witness to key milestones in our history. The survey documents the challenges we as New Yorkers have faced over the last half century, from the disinvestment of the 1970s to the rapid gentrification of the 2010s. The data reveal persistent patterns of inequality as well as our increasing diversity—capturing both divergent and shared experiences.

For the 2021 NYCHVS, the 18th survey cycle, we were presented with a unique opportunity to collect information about how our residents and communities fared during the first year of the COVID-19 pandemic. In this report, we use these data to focus on NYC's essential workers and their families. This lens is vital to record this moment in our city and to gather information that can be used to highlight the disparate impact of the pandemic and, as we move forward, trace differential recovery over time.

We recently launched the Center for Research on HOME to disseminate research findings to decision makers and to those who are represented in, and heard through, our data. We see this as critical to our broader obligation to provide sound evidence to promote a more just and equitable city. It is our hope that this report is one small contribution toward that end.

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March 22, 2020 marked the beginning of New York State on PAUSE when all non-essential businesses were ordered to close in-office functions.¹ In New York City, PAUSE remained in effect for eleven weeks. That time was immensely challenging for us all, but even more so for the city's essential workforce.

In this report, we provide a detailed analysis of NYC's 1.1 million essential workers—those who worked outside the home during PAUSE. We examine who they are, where they live, and how they and their families fared in the first months of the pandemic. We also take a deeper look at the subset of essential workers who are people of color as well as those who were low-income in 2020 to shed light on the ways that essential work during the pandemic reflected and reinforced existing disparities.

Who are NYC's essential workers?

New York City is home to 1.1 million people who worked outside the home during PAUSE. NYC's essential workforce reflects the diversity of the city: 72 percent are people of color (POC), 46 percent were born outside the United States, and 46 percent identify as female.



Figure 1. New York City's essential workers

Table 1 shows the demographics and nativity of NYC's essential workers overall as well as the 340,000 (30 percent of all essential workers) who were low-income. Here, low-income essential workers are defined as those individuals who worked outside the home during PAUSE and had an annual income from all sources in 2020 of less than \$31,200 (the equivalent of working full-time on NYC's \$15 minimum hourly wage).

How do we define essential workers?

The NYCHVS collected information about people who worked during PAUSE. Respondents in the 2021 NYCHVS COVID-19 Module were asked the following question:

Did any of [your/Person's] work require [you/them] to work outside the home during PAUSE, the stay at home period in New York in early 2020?

If needed, the interviewer could clarify: PAUSE was the stay at home period in New York that began on March 22, 2020 and ended on June 7, 2020.

Data represent people who were living in NYC at the time of the 2021 NYCHVS interview (conducted between March and July 2021 and weighted to represent the NYC population as of April 2021) who worked at least one week during March, April, and May of 2020 (asked separately) and lived in NYC for most of this period (asked separately).

Answers were recorded for specific individuals on the household roster (collected earlier in the interview). Anyone who was required to work outside the home during PAUSE is defined here as an essential worker.

How do we define low-income essential workers?

The NYCHVS collects detailed employment and income data for the calendar year prior to the interview (here, 2020). Income and earnings for each person across all sources was summed to provide total personal income for 2020. People who were identified as an essential worker who had a total personal income of \$31,200 or less in 2020 were defined as low-income. \$31,200 is the equivalent of working full time (40 hours a week for 52 weeks) at NYC's \$15 minimum wage.

An essential worker's actual hourly wage (or equivalent) may be higher or lower. The focus on this report is the characteristics of essential workers and not the pay rate for certain types of work. We therefore use annual personal income to define low-income because it reflects the total economic resources an essential worker received, regardless of hours worked, number of jobs, period(s) of unemployment, or other sources of income. A disproportionate share of low-income essential workers are people of color (85 percent of low-income compared to 72 percent of all essential workers regardless of income), identify as female (51 percent compared to 46 percent overall), and were born outside the US (54 percent compared to 46 percent overall).

Table 1. New York City's essential workers

	All essential w	orkers	Low-income essential workers		
All NYC essential workers	1,099,000	100%	337,200	100%	
Person of Color (POC)	795,900	72%	286,500	85%	
Born outside the US	507,800	46%	181,600	54%	
Identifies as female	505,100	46%	172,200	51%	



Figure 2. Demographics of low-income essential workers

Essential work during PAUSE

The type of work that required people to work outside the home is varied and so are the work patterns of essential workers. Overall, 70 percent of essential workers were employed full-time for all eleven weeks of PAUSE.

Our data show that the essential workforce includes many New Yorkers who worked only part-time, did short-term work during PAUSE, took on a second (or third) job, or experienced a reduction in hours or lost or left their job entirely before the end of lockdown. A relatively small share started a job (7 percent), while 16 percent stopped working at a job during PAUSE. Just under 250,000 essential workers (about 1 in 4) reported working more than 40 hours in a typical week in 2020 and 27 percent had multiple jobs during PAUSE.

	All essential workers		
During PAUSE			
Worked all 11 weeks	880,000	80%	
Started a job during PAUSE	79,940	7%	
Stopped a job during PAUSE	171,500	16%	
Worked full-time	925,300	84%	
Worked multiple jobs during PAUSE	296,500	27%	
Worked >40 hours / week (in 2020)	247,400	23%	

Table 2. Labor patterns of essential workers during PAUSE

NYC's essential workers span a wide range of industries. Nearly 1 in 4 essential workers (277,000) were employed in healthcare; 1 in 10 worked in the food industry. A smaller share worked in childcare and family services (5 percent), cleaning services (5 percent), transit (4 percent), or delivery and warehousing (4 percent)-all of which are recognizable frontline industries.²

Nearly half of those who worked outside the home during PAUSE were employed in another industry not specifically identified in our survey. The distribution by industry is generally similar for NYC's nearly 340,000 lowincome essential workers, with one notable difference. The food industry employs 10 percent of all essential workers, but 20 percent of low-income essential workers.

- Overall, the food industry had the highest share of essential workers that were low-income (58 percent) and lowest median income at \$28,000, followed by delivery and warehousing (43 percent low-in come) and childcare and family services (37 percent low-income), each with a median income of \$35,000.
- The median income of NYC's essential workers was \$45,000 across all industries, well below the citywide median income of \$51,200 for all New Yorkers employed during PAUSE.

Table 3. Essential workers by sector					Median
	All		Low-Inco	ome	income
	Essential W	orkers	Essential W	in 2020	
All NYC essential workers	1,099,000	100%	337,200	31%	\$45,000
Health	277,000	25%	81,060	29%	\$45,000
Food	115,100	10%	66,800	58%	\$28,000
Childcare, family services	51,330	5%	19,150	37%	\$35,000
Cleaning services	50,800	5%	15,250	30%	\$42,000
Transit	47,120	4%	10,990	23%	\$48,000
Delivery, warehousing	43,240	4%	18,420	43%	\$35,000
All other essential work	514,300	47%	124,500	24%	\$53,000
All NYC workers (essential + non-essential)					\$51,200

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The demographics and nativity of essential workers varies substantially by industry. The food, cleaning services, transit, and delivery and warehousing industries all employed a disproportionately large share of essential workers who are POC. Essential work is highly gendered. More than 70 percent of essential workers employed in healthcare and childcare and family services identify as female. The food, childcare and family services, cleaning services, and transit industries all employed a disproportionately large share of essential workers who were born outside of the US.

The characteristics of low-income essential workers reveal stark differences within and across industries.

- In every industry, more low-income essential workers are POC.
- The difference is largest in childcare and family services, where 84 percent of low-income essential workers are people of color, compared to 73 percent overall.
- In food and cleaning services, more than 90 percent of low-income essential workers are POC.

In all industries except cleaning services and delivery and warehousing, more low-income essential workers identify as female. The gender gap is larger for some industries. In healthcare, 83 percent of low-income essential healthcare workers are female compared to 73 percent overall. In childcare and family services, 85 percent of low-income essential workers are female compared to 75 percent overall. In all industries except food and childcare and family services, more low-income essential workers were born outside of the US. In transit, 68 percent of low-income essential workers are immigrants compared to 55 percent overall.

					Born		All esser	
	POC	2	Fema	le	outside c	of US	workers	
All NYC essential workers	795,900	72%	505,100	46%	507,800	46%	1,099,000	100%
Health	201,600	73%	202,700	73%	139,300	50%	277,000	100%
Food	101,700	88%	51,110	44%	67,700	59%	115,100	100%
Childcare, family services	37,350	73%	38,390	75%	31,030	60%	51,330	100%
Cleaning services	43,650	86%	15,960	31%	31,540	62%	50,800	100%
Transit	40,780	87%	8,890	19%	25,820	55%	47,120	100%
Delivery, warehousing	37,190	86%	6,392	15%	21,720	50%	43,240	100%
All other essential work	334,400	65%	180,100	35%	192,800	37%	514,300	100%

Table 4. Demographics and nativity of NYC's essential workers, by industry

Table 5. Demographics and nativity of NYC's low-income essential workers, by industry

	POC Female		Born outside of US		Low-income essential workers			
Low-income essential workers	286,500	85%	172,200	51%	181,600	54%	337,200	100%
Health	65,640	81%	67,540	83%	46,320	57%	81,060	100%
Food	60,510	91%	29,960	45%	39,590	59%	66,800	100%
Childcare, family services	16,140	84%	16,330	85%	11,030	58%	19,150	100%
Cleaning services	14,260	94%	4,199	28%	9,844	65%	15,250	100%
Transit	9,810	89%	2,594	24%	7,432	68%	10,990	100%
Delivery, warehousing	16,320	89%	1,999	11%	9,566	52%	18,420	100%
All other essential work	103,200	83%	47,380	38%	58,060	47%	124,500	100%



Figure 4. Focus on Essential Workers in the Food Industry

Total essential workers in NYC Essential workers in the food industry	1,099,000 115,100
% of NYC Essential workers who are in the food industry	10%
NYC Low-income essential workers	337,200
Low-income essential workers in the food industry	66,800
% of Low-income NYC Essential workers who are in the food industry	20%
Essential workers in the Food Industry	115,100
Low-income essential workers in the the food industry	66,800
% of essential workers in the food industry who are low-income	58%
Low income essential workers in the food industry	66,800
Low-income essential workers in the food industry who are POC	60,510
% of low-income essential workers in the food industry who are POC	91%

Figure 5. Focus on Essential Workers in the Healthcare Industry



Total essential workers in NYC	1,099,000	
Essential workers in the healthcare industry	277,000	050/
% of NYC essential workers who are in the healthcare industry		25%
Essential workers in the healthcare industry	277,000	
Low-income essential workers in the healthcare	81,060	
% of NYC essential workers in healthcare who are low-income		29%
Low income essential workers in the healthcare industry	81,060	
Low-income essential workers in healthcare who are POC	65,640	
% of NYC low-income essential workers in healthcare who are POC		81%
Low-income POC essential workers in the healthcare industry	65,640	
Low-income POC essential workers in healthcare who identify as female	55,550	
% of NYC POC low-income essential workers in healthcare are female		85%

Living conditions of essential workers and their families

NYC's 1.1 million essential workers face many of the same conditions as all New Yorkers, including finding adequate housing that is affordable to them. We know that residential crowding is associated with a variety of negative outcomes; during the pandemic, crowding was particularly detrimental as people struggled with remote learning and social distancing within tight living quarters.

More than 815,000 households included one or more essential worker. Overall, the rate of crowding among these essential worker families was 12 percent, compared to 8 percent for all NYC households. Among the nearly 260,000 households with one or more low-income essential workers, nearly 1 in 5 lived in crowded conditions. The share of essential workers living in crowded conditions is higher. More than 150,000 (14 percent) of all essential workers were crowded and 21 percent of low-income essential workers were crowded.

Table 6. Crowding conditions among essential workers

	Crowd	ed	Tota	1
All NYC households	245,700	81/0	3,157,000	100%
	0 (000	100 (016 000	1000/
All households 1+ essential workers	96,200	12%	816,200	100%
All households with 1+ low-income essential worker	46,830	18%	259,400	100%
Essential workers who are crowded	151,800	14%	1,099,000	100%
Low-income essential workers who are crowded	70,590	21%	337,200	100%

Figure 6. Rates of residential crowding among essential workers



Where do NYC's essential workers live?

Essential workers live throughout NYC, but some neighborhoods are home to more than others. Jamaica (QN) is home to the most essential workers, with more than 50,000 residents who worked outside the home during PAUSE. Soundview and Parkchester (BX) are home to the second highest number of essential workers with just under 40,000—in total, 1 in 5 residents are an essential worker.

Greenpoint/Williamsburg (BK) has the largest number of essential workers of any neighborhood in Brooklyn with about 30,000 essential workers. North Shore (SI) is home to the most essential workers in Staten Island with about 27,000 and Washington Heights (MN) is home to the most in Manhattan with more than 25,000 essential workers.



Figure 7. Where Essential Workers Live

Although every neighborhood in NYC is home to a large number of essential workers, some communities are home to a disproportionate share of essential workers who are POC. The concentration of essential workers who are POC in certain neighborhoods mirrors NYC's broader pattern of residential segregation.

- In Jamaica, (QN), more than 95 percent of essential workers are POC.
- In contrast, South Shore (SI) is home to about 23K essential workers, 15% of whom are POC.
- The Upper East Side (MN) is home to about 20K essential workers, 22% of whom are POC.

Figure 8. Share of Essential Workers who are POC within Neighborhood



Health of Essential Workers

Essential workers, by definition, were required to work outside of the home for their job. Many worked at the frontline—interacting with the public, but all essential workers traveled to and from work and interacted with people outside the home. This placed them at greater risk of contracting COVID-19 due to increased exposure, regardless of demographics or income.

By July of 2021 (the first 16 months of the pandemic), 965,000 New Yorkers (12 percent of the population) had been diagnosed with COVID-19 by a doctor or other healthcare professional. Essential workers had a higher rate of diagnosis: 15 percent had COVID-19 during this same period. The rate of diagnosis is slightly higher for low-income essential workers. Among all low-income essential workers, 17 percent were diagnosed with COVID-19 in the first 16 months of the pandemic.

Family members who lived with an essential worker had a COVID-19 diagnosis rate that was similar to citywide (12 percent). Those who lived with a low-income essential worker experienced a slightly higher rate of diagnosis (13 percent). Together, essential workers and their families represent 37 percent of COVID-19 diagnoses, citywide, during this period.

Table 7. COVID Diagnosis

	Diagnose COVID		Populat	Share of all NYC	
	People	Rate	People	Share	diagnoses
All NYC	965,600	12%	8,354,000	100%	100%
All NYC Essential Workers	170,300	15%	1,099,000	13%	18%
who were low-income	56,530	17%	337,200	4%	6%
Family of low-income essential workers	83,620	13%	665,800	8%	9%
Low-income essential workers + family	140,100	14%	1,003,000	12%	15%
Family of any essential worker	190,200	12%	1,567,000	19%	20%
Essential workers + family	360,500	14%	2,666,000	32%	37%

How we measure COVID-19 diagnosis

Each respondent who participated in the 2021 NYCHVS COVID-19 Module was asked the following question:

[Were you/Which of the people who live in your [apartment/house], including you, were] told by a doctor or other health professional that [you/they] had or likely had coronavirus or COVID 19?

Answers were recorded for specific individuals on the household roster (collected earlier in the interview). Data represent people who were living in NYC at the time of the 2021 NYCHVS interview (conducted between March and July 2021 and weighted to represent the NYC population as of April 2021). The NYCHVS data on COVID-19 diagnoses include individuals who moved to NYC after March 2020 and does not include those who left the city during prior to the survey period. COVID-19 diagnosis is measured as a cumulative incidence with a variable reference, starting with the first diagnoses of the SARS-CoV-2 virus in early 2020 up until the respondent was interviewed; depending on the household, this reference period ranged from 12- to 16-months.

This question was adapted by the NYCHVS team from a widely used question about asthma diagnosis.³ The team used this phrasing rather than asking about a positive lab test because testing capacity was limited in the early days of the pandemic.⁴ Home tests for COVID-19 were not widely available until later in 2021 after our survey period had concluded.⁵

How do our estimates compare to other sources of information?

Data on COVID-19 cases, hospitalizations, and deaths have been available from a number of sources since early in the pandemic as both daily and cumulative counts, by geography. The 2021 NYCHVS self-report measure of COVID-19 diagnosis is parallel to COVID-19 cases, but it is important to understand the difference between these measures.

COVID-19 cases represent positive lab tests reported to local, state, and national health agencies. In some cases, such as New York State reporting, adjustments are made to measure persons with a positive tests, rather than the count of positive tests (for example, when someone has multiple tests in a short period or when there is a re-infection). These measures ensure complete coverage of the universe of people who were tested for COVID-19; however, it does not account for probable cases diagnosed by a doctor or health professional when a positive test was absent. In some cases, such as the New York City Department of Health reporting, official statistics also include probable cases of COVID-19.

Source	Cumulative count for NYC
2021 NYCHVS self-report diagnosis	965,600
NYC Department of Health, confirmed and probable cases ⁶	966,231*
NYS Department of Health, confirmed cases ⁷	945,874*

*through July 15, 2021

Both the NYCHVS self-report measure and published office statistics on number of COVID-19 cases have limitations that likely result in an under-estimate of the population with COVID-19. Some are unable to access health resources or do not seek medical help, particularly when they are asymptomatic or did not meet other guidance on when to get tested.

Figure 9. Rates of COVID-19 diagnosis among essential workers



Figure 10. Disproportionate impact among essential workers



Loss from COVID-19

The COVID-19 pandemic has caused a dramatic loss of life. As of May 1st 2023, the WHO reported more than 6.9 million deaths, worldwide. In the U.S. alone, more than 1.1 million people have died of COVID-19.⁸ In New York City, more than 45,000 lives have been lost.⁹

Our survey is the first to capture representative data on how many New Yorkers lost someone with whom they were close due to COVID-19.

- About 1 in 4 New Yorkers (nearly 2 million residents) lost at least one person.
- More than 1 in 10 (almost 900,000 residents) lost three or more people.

The loss of family, friends, colleagues, and neighbors from COVID-19 has left a permanent mark on our communities and our city. The scale of this loss is profound, not only because New York City was the epicenter of the pandemic in the U.S. in the early days before treatments or vaccines but also because we are a global city. In 2021, New York City was home to more people who were born outside the U.S.¹⁰ than the entire population of Chicago.¹¹ NYC's role in international business and finance, arts and culture, and tourism and travel connects us to other parts of the globe, regardless of nativity or citizenship. Our personal and professional networks span every corner of the world, connecting us to places with large outbreaks and high mortality rates.

Among essential workers, the prevalence of loss is even higher. It is higher still among essential workers who are POC, where 30 percent lost one or more person and 15 percent lost three or more people with whom they were close. Almost 1 in 3 (32 percent) low-income essential workers who are POC lost at least one person to COVID-19; 1 in 6 (16 percent) lost three or more people.

	Lost one or more person to COVID-19		Lost three or more people to COVID-19		Total population	
All NYC	1,978,000	24%	887,500	11%	8,354,000	100%
All NYC essential workers	317,100	29%	154,500	14%	1,099,000	100%
Essential workers who are POC	237,100	30%	122,500	15%	795,900	100%
Low-income essential workers	105,100	31%	50,400	15%	337,200	100%
who are POC	91,740	32%	46,970	16%	286,500	100%

Table 8. New Yorkers who lost someone with whom they were close due to COVID-19





Conclusion

This report presents new data on NYC's essential workforce using a more precise definition of essential work than is typically possible from other data sources. Rather than relying on industry or occupation as a proxy for essential work, here we were able to identify essential workers who were required to work outside the home during PAUSE, the eleven weeks of lockdown in New York City during early 2020.

Our analysis quantifies many things we already know. NYC's essential workforce mirrors deep and persistent structural inequalities in our city—by race/ethnicity, by gender, by nativity. In every industry, a disproportionate share of low-income essential workers are people of color.

Stark differences persist in the residential environment of essential workers. Overall, the households where NYC's 1.1 million essential workers live are one-and-a-half times as likely to be crowded compared to NYC overall and households with low-income essential workers are more than two times as likely. While essential workers live throughout the city, those who are POC are highly concentrated in certain neighborhoods. In some communities, the share of essential workers who are POC exceeds 95 percent.

Essential work reflects and reinforces existing disparities, but the pandemic widened the gap for thousands of New Yorkers. Its impact on key dimensions of well-being for essential workers is likely to have lasting effects for years to come and across generations. NYC's essential workers were more likely to be diagnosed with COVID-19 during the first 16-months of the pandemic when the risk of hospitalization and death were highest.¹² The long-term effects of COVID-19 on physical and mental health are still unknown, but evidence suggests post-acute symptoms are common and sometimes severe.¹³ Loss from COVID-19 was pervasive across many New Yorkers, but the prevalence was significantly higher among essential workers and highest among those who are POC or were low-income.

Without our essential workforce, New York City would have been unable to endure the first weeks and months of the pandemic. Those whom we relied on the most carried an incredible burden. But these New Yorkers are essential every day. Acknowledging the ongoing inequalities is a critical, albeit insufficient, step toward meaningful change.



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About the Center for Research on HOME

The mission of the Center for Research on Housing Opportunity, Mobility, and Equity (HOME) is to create sound, relevant research evidence on housing as both a source of disparities and a means for achieving greater equity for all New Yorkers.

We work to translate our findings into practice. All our research is done by the City of New York, for the City of New York. We are integrated into the country's largest municipal housing agency. This gives us a unique opportunity to understand the current and future needs of decision-makers and promote the integration of research evidence within the policymaking process to better serve all New Yorkers.

Illustrations by Carolina Mascoso

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Data and Methodology

Unless otherwise noted, all data are from the 2021 New York City Housing and Vacancy Survey (NYCHVS).

The NYCHVS is a citywide representative survey of housing units and resident population conducted by the U.S. Census Bureau on behalf of the City of New York. The 2021 NYCHVS is the 18th survey cycle and represents an important milestone in the history of the survey. For the first time since 1991, the NYCHVS underwent a redesign focused on modernizing the survey, expanding its scope, increasing language access, improving data quality, and ensuring the use value of the data for the next generation of NYCHVS users. The 2021 NYCHVS was also unique in that it was conducted one year after the outbreak of COVID-19.

The NYCHVS is based on a statistical sample of housing units, drawn by the U.S. Census Bureau to represent the New York City housing stock and resident population. Each housing unit that participated in the NYCHVS is weighted such that it represents that individual unit (and its occupants, where appropriate) and other similar units as of April 2021. The 2021 NYCHVS had a sample of about 12,000 housing units and a response rate of 73.3 percent.

The NYCHVS is collected as an in-person survey where one occupant provides information on the unit, building, themselves, and anyone else who lives with them at the time of the survey. The COVID-19 Module was administered to each respondent who participated in the core interview and the vast majority of respondents answered these supplemental questions.

The data shared in this report are based on custom tabulations by the authors using internal files that have restricted access. The Census Bureau has reviewed this data product to ensure appropriate access, use, and disclosure avoidance protection of the confidential source data used to produce this product (Data Management System (DMS) number: P-7519373, Disclosure Review Board (DRB) approval number: CBDRB-FY23-POP001-0073, CBDRB-FY22-199, and CBDRB-FY22-POP001-0101.

Data definitions

PAUSE (Policies Assure Uniform Safety for Everyone) was an executive order issued by New York State that required all non-essential business to remain closed until certain conditions were met. In New York City, this lasted for 11 weeks from March 22, 2020 through June 7, 2020. Essential workers are defined as individuals who were required to work outside the home as part of their job during PAUSE.

Low-income essential workers are defined as those with total income from all sources in 2020 of \$31,200 or less. This is the equivalent of working 40 hours a week for 52 weeks at the NYC minimum wage of \$15. Income includes earnings from one or more job that required them to work outside the home during PAUSE as well as any other sources of income, such as a second job, cash assistance, retirement income, etc. This is a measure of individual income, not household income.

People of Color or POC are defined as individuals who identified as any race other than White or who identified as Hispanic. This includes Black, non-Hispanic; Hispanic; Asian, non-Hispanic; anyone who identified as Other; or those who identified as two or more races. This information was collected for all members of each surveyed household in two questions: (1) a yes-or-no questions asking "[Are you/Is Person] of Hispanic, Latino, or Spanish origin?" and (2) a select-all-that-apply question "What is [your/Person's] race?" The second question had the following response options: 1. White, 2. Black or African American, 3. American Indian or Alaska Native; 4. Asian or Asian American, 5. Native Hawaiian or Other Pacific Islander, and 6. Other.

Female or Identify as Female is defined as those who identified as female, rather than male or another gender identity.

Born outside the US is defined as those who reported a place of birth that was not the United States (which includes Puerto Rico).

Industry is based on self-reported information that asked workers about the industry they worked in during PAUSE. Respondents could select multiple industries if they worked more than one job.

Maps of where essential workers live show the count of essential workers in a given Public Use Microdata Area (PUMA) based on the home address at the time of the interview for the 2021 NYCHVS. Alternative maps show the share of essential workers in a given PUMA who identified as POC.

Crowding measures the ratio of persons per bedroom. A household is defined as crowded if there were more than two persons per bedroom. By this definition, households with only one or two members cannot be overcrowded.

Each respondent in the 2021 NYCHVS was asked which household members, if any, had been told by a doctor or other health professional that they had or likely had COVID-19. Here we refer to this as COVID-19 Diagnoses. These estimates therefore differ from reported lab tests and may also underrepresent infection where an individual did not seek medical help.

Each respondent in the 2021 NYCHVS was asked if they personally had lost someone close to them from COVID-19. Of those who responded affirmatively, a follow-up questions was asked as to whether they had lost three or more people from COVID-19. Every household member who lived with someone who indicated "Yes" to either one of these questions was treated as having experienced the loss as well. Here we refer to this as Loss from COVID-19.



