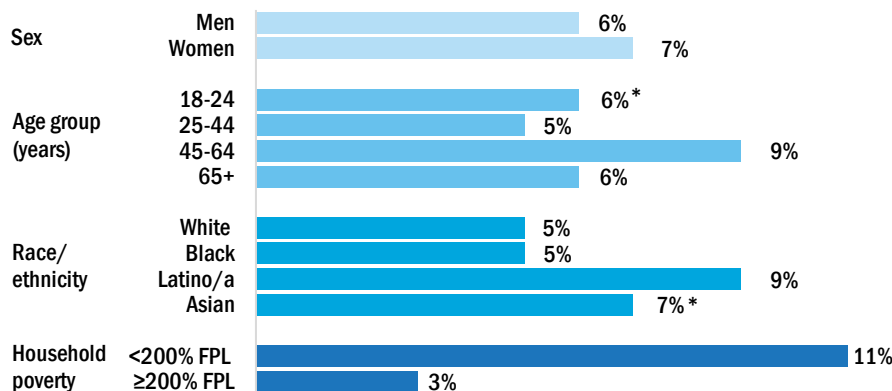# Social Determinants of Mental Health among New York City Adults

Social determinants of health include conditions in the environment where people live, learn, work, and play[1] such as housing, education, income, and wealth, among others. They have been shown to be associated with physical and mental health.[2] Due to the history of racial and ethnic discrimination in the US, there are differences in access and exposure to health-promoting and impairing conditions, resulting in health inequities.[3] In particular, economic strain[4] as well as experiences of discrimination[5] and stressful living environments[6] are related to poorer mental health outcomes, including higher incidences of depression and anxiety.[7] Using data from the 2017 NYC Social Determinants of Health (SDH) survey, this brief examines the prevalence of serious psychological distress (SPD), which includes mental health problems that may affect social, occupational, and educational functioning,[4] among adults in New York City (NYC). Specifically, it focuses on understanding the association between mental health and social determinants including economic hardship, experiences of discrimination, environmental stressors at home, and social support.

Prevalence of serious psychological distress was higher among Latinos/as and low-income adults

- In 2017, an estimated 428,000 (7%) of NYC adults had SPD.
- Men (6%) and women (7%) had a similar prevalence of SPD.
- The prevalence of SPD was higher among adults ages 45 to 64 years (9%) compared with adults ages 25 to 44 (5%).
- The prevalence of SPD was higher among Latino/a (9%) compared with White (5%) and Black (5%) adults.
- Adults with lower household income (less than 200% of the federal poverty level) had a higher prevalence of SPD (11%) than those with income greater than 200% of the federal poverty level (3%).

Prevalence of serious psychological distress among New York City adults by demographic characteristics, 2017

FPL = Federal poverty level; White, Black, Asian/Pacific Islander race categories exclude Latino/a ethnicity. Latino/a includes Hispanic or Latino/a of any race.
*Estimate should be interpreted with caution. Estimate's Relative Standard Error (a measure of estimate precision) is greater than 30%, making the estimate potentially unreliable.
Source: NYC Social Determinants of Health Survey, 2017

Definitions:

Serious psychological distress (SPD) is defined as having a score greater than or equal to 13 on the Kessler 6 (K6) scale,[6] a six-item scale developed to identify people highly likely to have a diagnosable mental illness and associated functional limitations. Using a five point scale from "all of the time" to "none of the time," survey respondents were asked to rate the frequency of six symptoms of mental illness or nonspecific psychological distress: "During the PAST 30 DAYS, how often did you feel …1. So sad or depressed that nothing could cheer you up; 2. Nervous; 3. Hopeless; 4. Restless or fidgety; 5. That everything was an effort; 6. Worthless.

Race/ethnicity: For the purpose of this publication, Latino/a includes persons of Hispanic or Latino/a origin, as identified by the survey question "Are you Hispanic or Latino/a?" and regardless of reported race. Black, White, and Asian race categories exclude those who identified as Latino/a.

Household income is the percentage of individuals living in households whose annual income is below the federal poverty level (FPL).

One or more material hardship includes not having enough money to make ends meet or not enough money for: healthcare, rent, childcare, basic items for one's child or family members, or food.
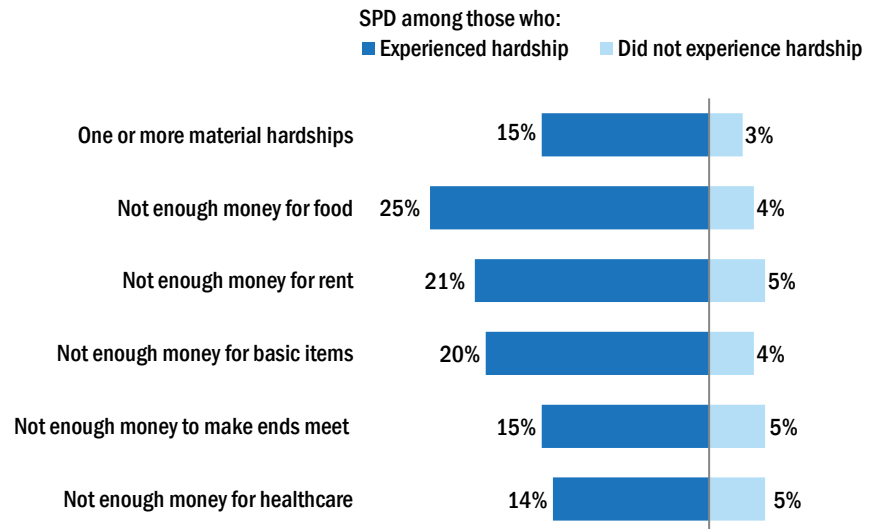
Experiences of discrimination: Survey respondents were asked to indicate how frequently they experienced certain forms of discrimination for any reason (e.g., race, gender, sexual orientation, etc.). For the purpose of this publication, differences in SPD were examined between those who reported experiencing discrimination at least once a week or a few times per month and those who never experienced discrimination.

Adult New Yorkers experiencing material hardships had a higher prevalence of serious psychological distress

- Overall, adults who experienced one or more material hardships in the past 12 months had a higher prevalence of SPD (15%) than adults who did not experience any material hardships (3%).

- NYC adults who did not have enough money to make ends meet in the past three months (15%) had a higher prevalence of SPD than those who did (5%).

- The prevalence of SPD was also higher among adults who did not have enough money for healthcare (14% vs. 5%), rent (21% vs. 5%), basic items (20% vs. 4%), or food (25% vs. 4%) in the past 12 months, compared with those who did not experience these hardships.

Serious psychological distress was higher among adults who experienced material hardships

Prevalence of serious psychological distress (SPD) by type of hardship, New York City, 2017

SPD among those who:
■ Experienced hardship   ■ Did not experience hardship

Hardship	Experienced	Did not experience
One or more material hardships	15%	3%
Not enough money for food	25%	4%
Not enough money for rent	21%	5%
Not enough money for basic items	20%	4%
Not enough money to make ends meet	15%	5%
Not enough money for healthcare	14%	5%

Source: NYC Social Determinants of Health Survey, 2017

Serious psychological distress was more likely among adults who experienced racism, discrimination, or harassment

- The prevalence of SPD was higher among adults who experienced racism "always," "a lot," or "some" (15%) compared with those who experienced racism "a little" or "not at all" in the past 12 months (5%).

- Compared with those who reported that these things never happen to them, SPD was more likely among NYC adults who reported being treated with less courtesy or respect than other people a few times per month or more (5% vs. 13%), receiving poorer service than other people at restaurants or stores (6% vs. 17%), being treated as if they were not smart (4% vs. 18%), being treated as if others were afraid of them (6% vs. 17%), or being threatened or harassed (5% vs. 25%).

Serious psychological distress was more likely among adults who experienced racism, discrimination, or harassment

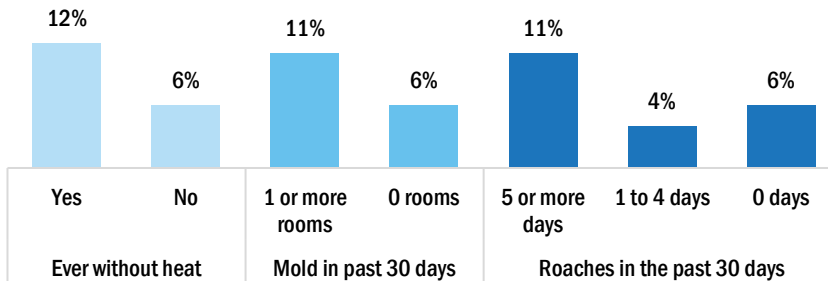Prevalence of serious psychological distress (SPD) by frequency of discrimination, New York City, 2017

SPD among those who experienced descrimination:
■ Never   ■ A few times per month or more

Discrimination	Never	A few times per month or more
Threatened or harassed	5%	25%
Treated as if not smart	4%	18%
Treated as if afraid of you	6%	17%
Received poorer service than others at restaurants or stores	6%	17%
Treated with less courtesy or respect than other people	5%	13%

Source: NYC Social Determinants of Health Survey, 2017

Prevalence of serious psychological distress was higher among adults who experienced environmental stressors at home

Serious psychological distress was higher among adults who experienced environmental stressors at home
Prevalence of serious psychological distress by environmental stressor, New York City, 2017

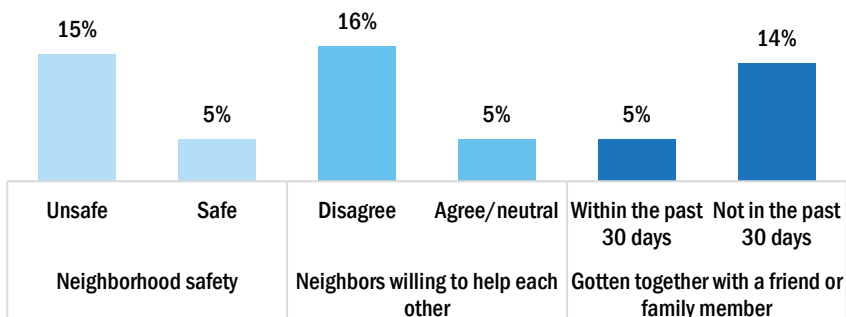

Source: NYC Social Determinants of Health Survey, 2017

- Adults who were ever without heat during the most recent winter (12%) had a higher prevalence of SPD than those who had heat (6%).

- The prevalence of SPD was higher among adults who reported seeing mold in their home during the past 30 days (11%) compared with those who did not (6%).

- Adults who saw roaches five or more days in the past 30 days had a higher prevalence of SPD (11%) than those who saw roaches one to four days (4%) or no days (6%).

Prevalence of serious psychological distress was higher among adults who felt they lived in unsafe neighborhoods or neighbhorhoods with fewer social ties

- Adults who reported that their neighborhood was not very safe or not at all safe from crime (15%) were more likely to have SPD than those who reported that their neighborhood was very safe or somewhat safe (5%).

Serious psychological distress was higher among adults who felt they lived in unsafe neighborhoods or neighbhorhoods with fewer social ties
Prevalence of serious psychological distress by neighborhood characteristic, New York City, 2017

Source: NYC Social Determinants of Health Survey, 2017

- Adults who disagreed or strongly disagreed that people in their neighborhood were willing to help each other had a higher prevalence of SPD (16%) than those who agreed or were neutral (5%).

- The prevalence of SPD was higher among adults who had not gotten together with a friend or family member in the past 30 days (14%) compared with those who had gotten together with a friend or family member almost every day, once a week, or a few times a month (5%).

Implications

Experiences of discrimination and racism, material hardship, poorer home living conditions, fewer social ties, and perceiving neighbors as unwilling to help others in their community were all associated with an increased prevalence of serious psychological distress. Serious psychological distress can lead to impairment in social, occupational, and school-related functioning,[2] further disadvantaging populations who are already at risk. Equity in mental health outcomes can be achieved by addressing social determinants of health through policy, programs, and environmental changes. Mental health treatment can also mitigate environmentally driven stress and other mental health concerns. Several initiatives are being implemented through ThriveNYC to help prevent and identify mental health issues and support community-based action and solutions. However, it is also critical that service providers respond to the social determinants affecting people who are accessing care, partner with community-based organizations, and facilitate connections to assistance across various sectors to address the financial, environmental, and social needs of New Yorkers.

Health Equity is attainment of the highest level of health for all people. Achieving health equity requires valuing everyone equally with focused and ongoing societal efforts to address avoidable inequalities, historical and contemporary injustices, and the elimination of health and health care disparities.* These disparities adversely affect groups of people who have systematically experienced greater obstacles to health based on their racial or ethnic group; religion; socioeconomic status; gender; or other characteristics historically linked to discrimination or exclusion.[+] For more information, please see the NYC Department of Health and Mental Hygiene's Center for Health Equity page.

*Definition from Centers for Disease Control and Prevention

[+] Nancy Krieger, PhD, Harvard School of Public Health

Data Source:

Social Determinants of Health Survey (SDH), 2017 is a survey of 2,335 adults ages 18 and older conducted by the NYC Department of Health and Mental Hygiene in 2017 to assess health and wellness. The SDH survey sample was drawn using both random-digit dialing and address-based sampling, with surveys completed via landline telephone or cell phone interview, web, or pencil-and-paper. Estimates presented here are based on self-reported data, which were weighted to the adult residential population per the American Community Survey 2015 and adjusted for the complex stratified survey design. Data are age-adjusted to the United States 2000 standard population, except for age-specific estimates.

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New York City Department of Health and Mental Hygiene

Epi Data Tables

Social Determinants of Mental Health among New York City Adults, 2017

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Table 3.	Prevalence of serious psychological distress among New York City adults by experiences of discrimination, 2017
Table 4.	Prevalence of serious psychological distress among New York City adults by living environment, 2017
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Data Sources

Social Determinants of Health Survey (SDH), 2017 is a survey of 2,335 adults aged 18 and older conducted by the NYC Department of Health and Mental Hygiene in 2017 to assess health and wellness. The SDH survey sample was drawn using both random-digit dialing and address-based sampling, with surveys completed via landline telephone or cell phone interview, web, or pencil-and-paper. Estimates presented here are based on self-reported data, which were weighted to the adult residential population per the American Community Survey 2015 and adjusted for the complex stratified survey design.

Data notes: Data are age-adjusted to the US 2000 Standard Population, except for age-specific estimates.

Table 1. Prevalence of serious psychological distress among New York City adults by demographic characteristics, 2017

Source: NYC Social Determinants of Health Survey, 2017

Data are weighted to the adult residential population per the American Community Survey, 2015.

Data are age-adjusted to the US 2000 Standard Population except those stratified by age group.

	Prevalence		Lower 95% Confidence Interval	Upper 95% Confidence Interval	p-value
Overall	6.51		5.26	8.03	N/A
Sex					
Male	5.90		4.07	8.47	Reference
Female	7.05		5.48	9.04	0.418
Age group (years)					
18-24	5.61	*	2.98	10.31	Reference
25-44	5.21		3.52	7.65	0.846
45-64	9.00		6.31	12.67	0.157
65+	5.89		3.96	8.67	0.896
Race/ethnicity[1]					
White	4.65		3.24	6.62	**0.007**
Black	5.47		3.05	9.63	0.090
Hispanic	9.12		6.68	12.32	Reference
Asian	7.25	*	3.02	16.41	0.591
Household income					
<200% FPL	11.16		8.43	14.63	**<0.001**
≥200% FPL	3.35		2.31	4.83	Reference

[1]White, Black, Asian/Pacific Islander race categories exclude Latino/a ethnicity. Latino/a includes Hispanic or Latino/a of any race.

*Estimate should be interpreted with caution. Estimate's Relative Standard Error (a measure of estimate precision) is greater than 30%, the 95% Confidence Interval half-width is greater than 10, or the sample size is less than 50, making the estimate potentially unreliable.

95% Confidence Intervals (CIs) are a measure of estimate imprecision: the wider the CI, the more imprecise the estimate.

Bold p-values indicate statistically significant difference from the reference group.

Table 2. Prevalence of serious psychological distress among New York City adults by material hardships, 2017

Source: NYC Social Determinants of Health Survey, 2017

Data are weighted to the adult residential population per the American Community Survey, 2015.

Data are age-adjusted to the US 2000 Standard Population except those stratified by age group.

	Prevalence	Lower 95% Confidence Interval	Upper 95% Confidence Interval	p-value
One or more material hardship				
Experienced hardship	14.63	11.23	18.83	**<0.001**
Did not experience hardship	3.04	2.20	4.18	Reference
Not enough money for food				
Experienced hardship	25.34	17.84	34.67	**<0.001**
Did not experience hardship	4.05	3.16	5.18	Reference
Not enough money for rent				
Experienced hardship	21.17	14.39	30.01	**<0.001**
Did not experience hardship	4.83	3.74	6.22	Reference
Not enough money for basic items				
Experienced hardship	19.65	13.94	26.98	**<0.001**
Did not experience hardship	3.54	2.62	4.77	Reference
Not enough money to make ends meet				
Experienced hardship	14.86	10.73	20.22	**<0.001**
Did not experience hardship	4.74	3.52	6.35	Reference
Not enough money for healthcare				
Experienced hardship	14.05	9.50	20.28	**0.002**
Did not experience hardship	5.48	4.26	7.03	Reference

Bold p-values indicate statistically significant difference from the reference group.

Table 3. Prevalence of serious psychological distress among New York City adults by experiences of discrimination, 2017

Source: NYC Social Determinants of Health Survey, 2017

Data are weighted to the adult residential population per the American Community Survey, 2015.

Data are age-adjusted to the US 2000 Standard Population except those stratified by age group.

	Prevalence	Lower 95% Confidence Interval	Upper 95% Confidence Interval	p-value
Experienced racial discrimination in past 12 months				
Experienced racism in past 12 months				
Always/a lot/some	14.98	10.38	21.12	**<0.001**
A little/not at all	4.59	3.19	6.58	Reference
Ever experienced discrimination in past 12 months				
You are treated with less courtesy or respect than other people				
At least once a week/few times per months	12.86	9.09	17.88	**0.002**
Never	5.34	3.82	7.41	Reference
You receive poorer service than other people at restaurants or stores				
At least once a week/few times per months	17.01	11.10	25.19	**0.003**
Never	5.97	4.49	7.89	Reference
People act as if they are afraid of you				
At least once a week/few times per months	17.29	11.05	26.04	**0.003**
Never	5.62	4.33	7.26	Reference
People act as if they think you are not smart				
At least once a week/few times per months	17.72	12.57	24.39	**<0.001**
Never	4.25	3.00	6.00	Reference
You are threatened or harassed				
At least once a week/few times per months	25.33	16.94	36.07	**<0.001**
Never	5.45	4.17	7.09	Reference

Bold p-values indicate statistically significant difference from the reference group.

Table 4. Prevalence of serious psychological distress among New York City adults by living environment, 2017

Source: NYC Social Determinants of Health Survey, 2017

Data are weighted to the adult residential population per the American Community Survey, 2015.

Data are age-adjusted to the US 2000 Standard Population except those stratified by age group.

	Prevalence	Lower 95% Confidence Interval	Upper 95% Confidence Interval	p-value
Ever without heat this winter				
Yes	11.63	8.26	16.12	**0.004**
No	5.52	4.22	7.19	Reference
Seen mold in home past 30 days				
One or more rooms	10.60	7.24	15.26	**0.024**
Zero rooms	5.74	4.44	7.40	Reference
Seen roaches in last 30 days				
5 or more days	10.88	7.76	15.04	Reference
1 - 4 days	4.03	2.24	7.15	**0.002**
0 days	6.07	4.58	7.99	**0.018**

Bold p-values indicate statistically significant difference from the reference group.

Table 5. Prevalence of serious psychological distress among New York City adults by neighborhood and social ties, 2017

Source: NYC Social Determinants of Health Survey, 2017

Data are weighted to the adult residential population per the American Community Survey, 2015.

Data are age-adjusted to the US 2000 Standard Population except those stratified by age group.

	Prevalence	Lower 95% Confidence Interval	Upper 95% Confidence Interval	p-value
Neighborhood safety				
Not very safe/not at all safe from crime	14.82	10.23	20.98	**0.001**
Very safe/somewhat safe from crime	5.10	3.94	6.58	Reference
Neighbors willing to help each other				
Strongly disagree, disagree	15.55	11.29	21.03	**<0.001**
Strongly agree, agree, neither agree nor disagree	4.87	3.65	6.46	Reference
Gotten together with friend or family member in past 30 days				
Almost every day/about once a week/a few times a month	4.93	3.91	6.19	**0.001**
Not in the past 30 days	13.68	9.21	19.86	Reference

Bold p-values indicate statistically significant difference from the reference group.