

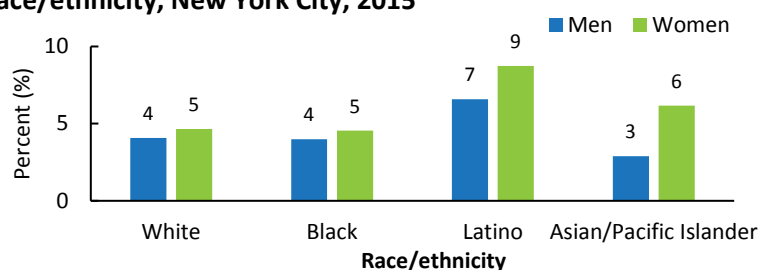
## Serious Psychological Distress among Adults in New York City, 2002-2015

Serious psychological distress (SPD) includes mental health problems that may impact social, occupational, and educational functioning.<sup>1</sup> SPD disproportionately affects women, Latinos, those with chronic diseases and income below the federal poverty level (FPL).<sup>1</sup> Disparities are likely due to differences in factors such as poor neighborhood conditions (e.g. high poverty, stress), access to, and quality of mental health care.<sup>2</sup> This data brief describes demographic characteristics of New York City (NYC) adults with SPD, their access to mental health treatment, and trends in the prevalence of health behaviors and chronic diseases.

### Prevalence of serious psychological distress in New York City by demographic characteristics, 2015

- Approximately 354,000 (5%) New York City (NYC) adults had SPD, similar to the 2015 national prevalence of 5%. SPD prevalence has decreased since 2002 (6%).
- Among adults with SPD, four in five (81%) had symptoms that interfered with their daily lives or activities, either some or a lot of the time.
- The age-adjusted prevalence of SPD was higher among women than men (6% vs. 5%).
- The prevalence of SPD among Latinos was about two times as high as those of Whites and Blacks (8% vs. 4% and 4%).
- NYC adults aged 45 to 64 had a higher prevalence of SPD compared with adults aged 18 to 24 (6% vs. 4%).
- Bisexual adults were over four times as likely to have SPD as heterosexuals (21%\* vs. 5%).
- The prevalence of SPD was five times as high among adults with household incomes below 100% of the FPL compared with those with household incomes at or above 600% FPL (10% vs. 2%\*).

### Prevalence of serious psychological distress by sex and race/ethnicity, New York City, 2015



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

Data are age-adjusted to the 2000 standard US population.

Source: NYC Community Health Survey, 2015

#### Definitions:

**Serious psychological distress (SPD)** is defined as having a score greater than or equal to 13 on the Kessler 6 (K6) scale<sup>3</sup>. The K6 is a six-item scale developed to identify persons with a high likelihood of having a diagnosable mental illness and associated functional limitations. The K6 asks about the frequency of each of the 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, rated on a 5 point scale from “All of the time” to “None of the time.” Only participants who answered all six questions were included in the analysis.

**Race/ethnicity:** White, Black, Asian/Pacific Islander categories exclude Latino ethnicity. Latino includes Hispanic or Latino of any race.

**Neighborhood poverty** (based on zip code) is defined as the percentage of the population living below the Federal Poverty Line (FPL) based on the American Community Survey 2009-2013. Neighborhoods are categorized into four groups as follows: “Low poverty” neighborhoods are those with <10% of the population living below the FPL; “Medium poverty” neighborhoods have 10-<20% of the population below FPL; “High Poverty” neighborhoods have 20-<30% of the population living below the FPL; “Very high poverty” neighborhoods have ≥30% of the population living below the FPL.

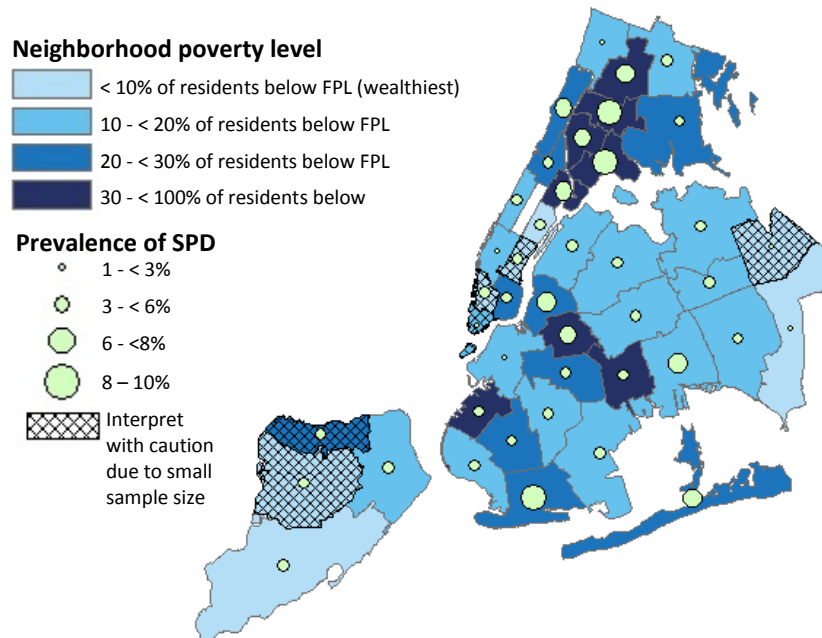
#### References:

1. Weissman JF, Pratt LA, Miller EA, Parker JD. Serious psychological distress among adults: United States, 2009-2013. NCHS Data Brief. 2015; 203: 1-8.
2. Chow JC, Jaffee K, Snowden L. Racial/ethnic disparities in the use of mental health services in poverty areas. American Journal of Public Health. 2003; 93(5): 792-797.
3. Center for Behavioral Health Statistics and Quality. 2014 National Survey on Drug Use and Health: Mental Health Detailed Tables. Substance Abuse and Mental Health Services Administration, Rockville, MD, 2015.
4. Kessler RC, Andrews G, Colpe LJ, Zaslavsky AM. Short screening scales to monitor population prevalence and trends in non-specific psychological distress. Psychological Medicine. 2002; 32(06): 959-976.

## Geographic characteristics of New York City adults with serious psychological distress

- In 2015, SPD prevalence was over three times as high among adults living in very high poverty neighborhoods compared with those living in low poverty neighborhoods (7% vs. 2%).
- The five neighborhoods with the highest SPD prevalence for the combined years of 2009, 2010, and 2012 were Hunts Point-Mott Haven, Coney Island, Crotona-Tremont, Greenpoint, and East Harlem. The five neighborhoods with the lowest SPD prevalence were Lower Manhattan,\* Chelsea-Clinton, Southeast Queens, Bayside-Little Neck,\* and Downtown-Heights-Slope.

### Prevalence of serious psychological distress (SPD) by United Hospital Fund neighborhood (UHF), New York City, 2009-2010 and 2012



The United Hospital Fund classifies NYC into 42 neighborhoods, comprised of contiguous ZIP codes. Neighborhood poverty level (based on ZIP code) defined as percent of residents with incomes below 100% of the Federal Poverty Level, per American Community Survey 2009-2013, in four groups: low/wealthiest (<10%), medium (10% - < 20%), high (20% - < 30%), and very high/poorest (>=30%). Data from multiple years were combined for analysis at UHF level. Data are age-adjusted to the 2000 standard US population.

Source: NYC Community Health Survey (CHS) 2009, 2010, and 2012 combined.

#### Data Sources:

**NYC Community Health Survey (CHS) 2002-2003, 2005-2006, 2008-2010, 2012-2013, and 2015.** The CHS is conducted annually by the Health Department with approximately 9,000 adults ages 18 and older. The CHS has included adults with landline phones since 2002 and, starting in 2009, also included adults who can be reached only by cell phone. Starting in 2011, CHS weighting methods were updated to incorporate Census 2010 data and additional demographic characteristics. For survey details, visit [www.nyc.gov/health/survey](http://www.nyc.gov/health/survey).

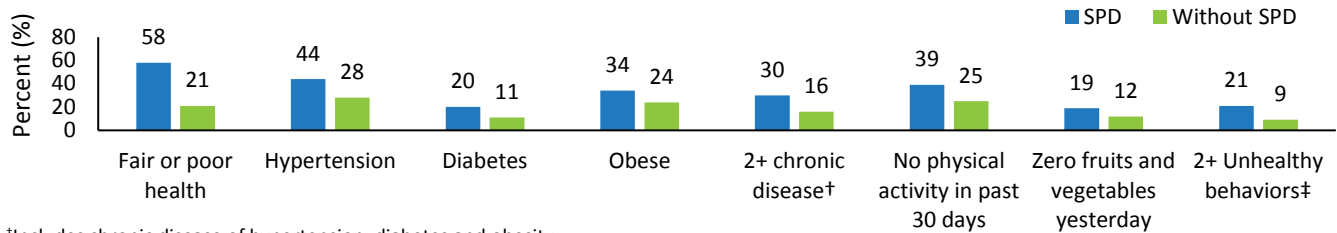
**Data notes:** Data are age-adjusted to the US 2000 Standard Population, except for age-specific estimates and where crude estimates are noted.

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

## Access to mental health care among New York City adults, 2015

- In 2015, about 46% of NYC adults with SPD received counseling or prescription medication for a mental health problem in the past 12 months.
- Among adults with SPD, men were less likely than women to receive counseling or prescription medication for a mental health problem in the last 12 months (34% vs. 54%); young adults aged 18 to 24 were less likely to receive counseling or prescription medication for a mental health problem than adults aged 45 to 64 (35%\* vs. 60%).
- NYC adults with SPD who had health insurance were more likely to receive counseling or prescription medication for a mental health problem in the last 12 months than those without insurance (49% vs. 30%\*).
- NYC adults with SPD who were uninsured, had Medicaid, or had private insurance were more likely to report they needed mental health treatment in the past 12 months but did not receive it compared with those with Medicare (29%\*, 27%, and 19% vs. 8%\*).

## Chronic disease and health behaviors among New York City adults by serious psychological distress status, 2015



†Includes chronic disease of hypertension, diabetes and obesity

‡Includes unhealthy behaviors of current smoking, no physical activity in past 30 days and no fruits or vegetables yesterday

Data are age-adjusted to the 2000 standard US population.

Source: NYC Community Health Survey (CHS) 2015

## Chronic disease and health behaviors among New York City adults with serious psychological distress, 2002-2015

- In 2015, NYC adults with SPD reported higher rates of hypertension (44% vs. 28%), diabetes (20% vs. 11%), and obesity (34% vs. 24%) than those without SPD. They were also more likely to report two or more chronic conditions<sup>†</sup> (30% vs. 16%).
- In 2015, adults with SPD were more likely to consume no fruits and vegetables on the previous day (19% vs. 12%) and to report no physical activity in the past 30 days (39% vs. 25%) than those without SPD. They were also more likely to have two or more unhealthy behaviors<sup>‡</sup> than those without SPD (21% vs. 9%).
- From 2002 to 2015, there was an increasing trend in the prevalence of diabetes and obesity among NYC adults with SPD (diabetes: 13% to 20%; obesity: 24% to 34%) as well as among those without SPD (diabetes: 8% to 11%; obesity: 18% to 24%). The prevalence of hypertension did not change among adults with SPD during this period.
- The prevalence of adults who did not consume fruits and vegetables on the previous day decreased from 2002 to 2015 among those with SPD (26% to 19%) and those without SPD (14% to 12%); however, the decrease among SPD is greater than those without SPD.

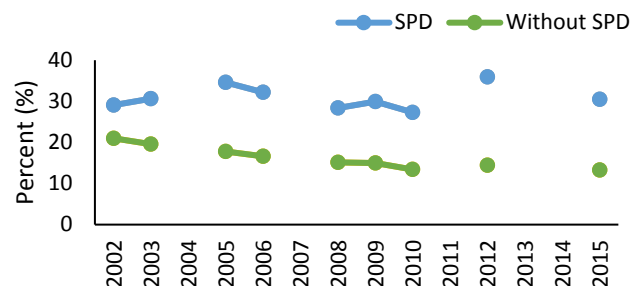
## Prevalence of current smoking among New York City adults

- NYC adults with SPD were more than twice as likely to be current smokers as those without SPD (31% vs. 13%) in 2015.
- Between 2002 and 2015, the prevalence of smoking among NYC adults with SPD did not change (29% to 31%). In contrast, the prevalence of smoking among adults without SPD decreased from 2002 to 2015 (21% to 13%).

†Includes chronic disease of hypertension, diabetes and obesity

‡Includes unhealthy behaviors of current smoking, no physical activity in past 30 days and no fruits or vegetables yesterday

## Prevalence of current smoking by serious psychological distress (SPD) status, New York City, 2002-2015



Data are age-adjusted to the 2000 US standard population.

Data not available for every year (represented by line gaps in figure)

Source: NYC Community Health Survey 2002-2015

**Authors:** Tsering Choden, Yiwei Gu, Stephanie Huynh, Jennifer Hoening, Christina Norman

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New York City Department of Health and Mental Hygiene





# Epi Data Tables

May 2018, No. 102

## Serious Psychological Distress among Adults in New York City, 2002-2015

### Data Tables

**Table 1a.** Prevalence of serious psychological distress (SPD) among New York City adults aged 18 years and older, by sex and race/ethnicity, 2002-2015

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**Table 3b.** Prevalence of unmet need for mental health care among New York City adults aged 18 years and older by serious psychological distress (SPD), 2015

**Table 4.** Prevalence of comorbidities and health behaviors among New York City adults aged 18 years and older, by serious psychological distress (SPD) status, 2015

**Table 5.** Prevalence of comorbidities and health behaviors among New York City adults aged 18 years and older, by serious psychological distress (SPD) status, 2002-2013, 2015

### Data Sources

**Community Health Survey (CHS), 2002-2003, 2005-2006, 2008-2010, 2012-2013, 2015** is conducted annually by the Health Department with approximately 9,000 non-institutionalized adults ages 18 and older. Estimates are age-adjusted to the US 2000 standard population. The CHS has included adults with landline phones since 2002 and, starting in 2009, has included adults who can be reached by cell-phone. CHS 2002-2008 data are weighted to the NYC adult population per Census 2000; starting in 2009, data are weighted to the 2008 HVS for phone usage and the Census 2000. CHS 2012 data are weighted to the adult residential population per American Community Survey, 2011. CHS 2013 data are weighted to the adult residential population per the American Community Survey, 2012. CHS 2015 data are weighted to the adult residential population per the American Community Survey, 2014. For survey details, visit [www.nyc.gov/health/survey](http://www.nyc.gov/health/survey).

### Definitions

**Serious psychological distress (SPD)** is defined as having a score greater than or equal to 13 on the Kessler 6 (K6) scale<sup>3</sup>. The K6 is a six-item scale developed to identify persons with a high likelihood of having a diagnosable mental illness and associated functional limitations. The K6 asks about the frequency of each of the 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, rated on a 5 point scale from "All of the time" to "None of the time." Only participants who answered all six questions were included in the analysis.

**Race/ethnicity:** White, Black, Asian/Pacific Islander categories exclude Latino ethnicity. Latino includes Hispanic or Latino of any race.

**Past year mental health treatment** is defined as having received either mental health counseling or medication in the past 12 months.

**Needed mental health care but didn't get it** is defined as respondents who answered "Yes" to "Was there a time in the past 12 months when you needed treatment for a mental health problem but did not get it?"

**Current smoking** is defined as individuals who replied "Yes" to ever smoking 100 cigarettes and smoke cigarettes "Everyday" or "Some days"

**Fruit and vegetable consumption** is defined as having zero serving of fruit or vegetables eaten on the previous day. A serving would equal one medium apple, a handful of broccoli, or a cup of carrots.

**Physical activity** is defined as no physical activities such as running, calisthenics, golf, gardening, or walking for exercise, other than regular job in past 30 days.

**Obesity:** Self-reported height and weight where Body Mass Index (BMI)  $\geq 25$

**Diabetes:** If respondent had ever been told by a doctor, nurse or health professional that they had diabetes

**Table 1a. Prevalence of serious psychological distress (SPD) among New York City adults aged 18 years and older, by sex and race/ethnicity, 2002-2015**

Source: NYC Community Health Survey (CHS), 2002-2003, 2005-2006, 2008-2010, 2012-2013, 2015

CHS has included adults with landline phones since 2002 and, starting in 2009, also has included adults who can be reached by cell phone

CHS 2002-2008 data are weighted to the NYC adult population per Census 2000; starting in 2009, data are weighted to the 2008 HVS for phone usage and the Census 2000. CHS 2012 data are weighted to the adult residential population per American Community Survey, 2011. CHS 2013 data are weighted to the adult residential population per the American Community Survey, 2012. CHS 2015 data are weighted to the adult residential population per the American Community Survey, 2014.

Data are age-adjusted to the US 2000 Standard Population.

	Age-adjusted prevalence of SPD								
	Overall	White		Black		Latino		Asian/Pacific Islander	
		Prevalence (95% Confidence Interval)	Men Prevalence (95% Confidence Interval)	Women Prevalence (95% Confidence Interval)	Men Prevalence (95% Confidence Interval)	Women Prevalence (95% Confidence Interval)	Men Prevalence (95% Confidence Interval)	Women Prevalence (95% Confidence Interval)	Men Prevalence (95% Confidence Interval)
<b>2002</b>	6.4 (5.8, 7.0)	3.5 (2.5, 4.9) <sup>D</sup>	6.5 (5.3, 8.1) <sup>U</sup>	4.1 (2.8, 6.0)	4.7 (3.6, 6.3)	10.1 (7.8, 13.0)	12.9 (10.9, 15.2)	4.1 (2.0, 8.3) *	3.9 (1.8, 8.1) *
<b>2003</b>	5.1 (4.5, 5.6)	3.6 (2.7, 4.7)	2.8 (2.1, 3.7)	3.0 (1.8, 4.9)	5.7 (4.3, 7.6)	8.2 (5.9, 11.4)	11.7 (9.5, 14.2)	2.3 (1.0, 5.0) *	3.2 (1.6, 6.4) *
<b>2005</b>	6.3 (5.7, 6.9)	2.9 (2.1, 3.9)	5.0 (3.7, 6.7)	4.9 (3.5, 6.8)	8.1 (6.5, 9.9)	8.3 (6.3, 10.8)	11.3 (9.5, 13.3)	3.3 (1.4, 7.6) *	6.8 (4.1, 11.1)
<b>2006</b>	6.4 (5.8, 7.0)	3.9 (2.9, 5.2)	5.6 (4.6, 6.8)	4.9 (3.4, 7.0)	6.1 (4.7, 7.8)	6.8 (5.2, 9.0)	11.2 (9.5, 13.1)	6.3 (3.8, 10.2)	4.2 (2.6, 6.8)
<b>2008</b>	5.9 (5.2, 6.6)	4.0 (2.8, 5.8)	3.9 (2.9, 5.2)	6.3 (3.9, 10.0)	6.5 (4.7, 8.8) <sup>D</sup>	8.9 (6.4, 12.3)	11.0 (8.9, 13.4)	3.8 (1.9, 7.4) *	3.8 (1.9, 7.4) *
<b>2009</b>	5.0 (4.4, 5.6)	2.6 (1.9, 3.6)	5.1 (3.7, 7.0)	4.1 (2.6, 6.3)	4.4 (3.0, 6.3)	5.3 (3.6, 7.6)	8.6 (6.9, 10.8)	4.9 (2.6, 8.9) *	5.7 (2.9, 11.1) <sup>*D</sup>
<b>2010</b>	4.4 (3.8, 5.2)	3.1 (2.0, 4.9)	4.0 (2.8, 5.6)	2.9 (1.5, 5.7) *	3.8 (2.3, 6.1)	7.0 (4.6, 10.3)	8.1 (6.2, 10.5)	^	4.5 (2.4, 8.1) *
<b>2012</b>	5.5 (4.8, 6.3) <sup>D</sup>	6.3 (4.3, 9.0)	4.7 (3.2, 6.9)	2.7 (1.6, 4.7)	3.5 (2.2, 5.6) <sup>U</sup>	8.5 (6.2, 11.6) <sup>U</sup>	8.2 (6.3, 10.5)	5.1 (2.7, 9.4) *	3.8 (1.8, 8.0) *
<b>2013</b>	5.3 (4.7, 6.0)	4.3 (3.0, 6.0)	5.3 (3.8, 7.2)	3.6 (2.2, 5.7)	4.0 (2.7, 5.9)	5.7 (4.2, 7.7)	9.8 (7.9, 11.9)	2.7 (1.4, 5.2) *	4.7 (2.8, 7.9)
<b>2015</b>	5.4 (4.8, 6.1)	4.1 (2.8, 5.8)	4.7 (3.4, 6.4)	4.0 (2.6, 6.2)	4.5 (3.3, 6.3) <sup>U</sup>	6.6 (5.0, 8.6)	8.7 (7.2, 10.6)	2.9 (1.7, 5.0)	6.2 (3.6, 10.5)

White, Black, Asian/Pacific Islander race categories exclude Latino ethnicity. Latino includes Hispanic or Latino 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.

<sup>^</sup>Data are suppressed due to imprecise and unreliable estimates.

<sup>U</sup>When rounding to the nearest whole number, round up.

<sup>D</sup>When rounding to the nearest whole number, round down.

**Table 1b. Prevalence of serious psychological distress (SPD) among New York City adults aged 18 years and older, by demographic, social, and economic characteristics, 2015**

Source: NYC Community Health Survey (CHS), 2015

CHS has included adults with landline phones since 2002 and, starting in 2009, also has included adults who can be reached by cell phone. CHS 2015 data are weighted to the adult residential population per the American Community Survey, 2014. Data are age-adjusted to the US 2000 Standard Population except those stratified by age group.

	Prevalence (95% Confidence Intervals)	p-value±	p-value±
<b>Overall</b>	5.4 (4.8, 6.1)	N/A	
<b>Sex</b>			
Male	4.6 (3.8, 5.5)	Reference	
Female	6.1 (5.2, 7.1)	<b>0.020</b>	
<b>Age group (years)</b>			
18-24	3.8 (2.5, 5.7)	Reference	
25-44	5.5 (4.4, 6.8) <sup>D</sup>	0.085	
45-64	6.3 (5.3, 7.4)	<b>0.009</b>	
65+	4.9 (3.8, 6.3)	0.264	
<b>Race/ethnicity<sup>1</sup></b>			
White	4.4 (3.4, 5.5)	Reference	0.931
Black	4.3 (3.3, 5.6)	0.931	Reference
Latino	7.9 (6.7, 9.2)	<b>&lt;0.001</b>	<b>&lt;0.001</b>
Asian/Pacific Islander	4.7 (3.0, 7.1)	0.786	0.745
Other	9.5 (4.9, 17.6) <sup>*D</sup>	0.106	0.102
<b>Borough of residence</b>			
Bronx	6.5 (5.3, 7.9) <sup>D</sup>	0.164	
Brooklyn	6.1 (5.1, 7.3)	0.285	
Manhattan	5.1 (4.0, 6.7)	Reference	
Queens	4.5 (3.3, 6.1) <sup>U</sup>	0.520	
Staten Island	4.1 (2.2, 7.3) <sup>*</sup>	0.444	
<b>Household poverty<sup>‡</sup></b>			
<100% FPL	9.6 (8.2, 11.3)	Reference	
100% - <200% FPL	6.2 (5.0, 7.6)	<b>&lt;0.001</b>	
200% - <400% FPL	4.5 (3.2, 6.4) <sup>U</sup>	<b>&lt;0.001</b>	
400% - <600% FPL	1.7 (1.1, 2.5)	<b>&lt;0.001</b>	
>= 600% FPL	2.0 (1.0, 4.2) <sup>*</sup>	<b>&lt;0.001</b>	
<b>Neighborhood poverty<sup>§</sup></b>			
Low poverty	2.5 (1.6, 3.9) <sup>D</sup>	Reference	
Medium poverty	5.6 (4.4, 6.9)	<b>&lt;0.001</b>	
High poverty	6.4 (5.2, 7.8)	<b>&lt;0.001</b>	
Very high poverty	6.7 (5.6, 8.1)	<b>&lt;0.001</b>	
<b>Sexual orientation</b>			
Heterosexual	5.1 (4.5, 5.8)	Reference	
Gay/Lesbian	3.2 (1.7, 6.0) <sup>*</sup>	0.083	
Bisexual	20.7 (12.4, 32.5) <sup>*</sup>	<b>0.002</b>	
<b>Health insurance type</b>			
Private	2.8 (2.2, 3.6)	Reference	
Medicare	8.9 (6.3, 12.5)	<b>&lt;0.001</b>	
Medicaid	8.8 (7.3, 10.6)	<b>&lt;0.001</b>	
Others	4.7 (2.6, 8.3)	0.192	
Uninsured	5.2 (3.7, 7.1)	<b>0.011</b>	
<b>Place of birth</b>			
US born	5.2 (4.4, 6.0)	Reference	
Born outside the US	5.8 (4.8, 6.8)	0.355	

<sup>1</sup>White, Black, Asian/Pacific Islander race categories exclude Latino ethnicity. Latino includes Hispanic or Latino 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.

<sup>U</sup> When rounding to the nearest whole number, round up.

<sup>D</sup> When rounding to the nearest whole number, round down

± Measure of statistical significance of t-test. Bold p-values indicate that the estimate is statistically different from the reference group.

‡ Household poverty is measured as the total income of the household and is categorized into five groups, relative to the Federal Poverty Line (FPL), as follows: Very high poverty (<100% FPL), High poverty (100%-<200% FPL), Medium poverty (200%-<400% FPL), Low poverty (400%-600% FPL) and Very low poverty (>=600% FPL).

§ Neighborhood poverty (based on ZIP code) was defined as percent of residents with incomes below 100% of the federal poverty level (FPL, based on American Community Survey 5-year files), separated into four groups: low (<10% FPL), medium (10%-<20% FPL), high (20%-<30% FPL) and very high (>=30% FPL).

**Table 1c. Prevalence of serious psychological distress (SPD) interference with life or activities some or a lot among New York City adults aged 18 years and older, by demographic, social, and economic characteristics, 2015**

Source: NYC Community Health Survey (CHS), 2015

CHS has included adults with landline phones since 2002 and, starting in 2009, also has included adults who can be reached by cell phone. CHS 2015 data are weighted to the adult residential population per the American Community Survey, 2014.

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

	Among those with SPD	
	Prevalence (95% Confidence Intervals)	p-value $\pm$
<b>Overall</b>	80.7 (75.9, 84.7)	N/A
<b>Sex</b>		
Male	82.5 (74.0, 88.7) <sup>U</sup>	Reference
Female	79.9 (73.7, 85.0)	0.581
<b>Age group (years)</b>		
18-24	78.3 (57.8, 90.5) <sup>*</sup>	Reference
25-44	82.2 (74.0, 88.3)	0.670
45-64	84.9 (78.7, 89.5)	0.458
65+	71.5 (57.8, 82.1) <sup>*D</sup>	0.515
<b>Race/ethnicity<sup>1</sup></b>		
White	88.4 (80.8, 93.3)	Reference
Black	71.6 (59.4, 81.3) <sup>*</sup>	<b>0.009</b>
Latino	79.0 (71.9, 84.7)	<b>0.038</b>
Asian/Pacific Islander	78.4 (61.9, 89.0) <sup>*</sup>	0.188
Other	62.1 (39.0, 80.8) <sup>*</sup>	<b>0.025</b>
<b>Borough of residence</b>		
Bronx	77.7 (66.3, 86.0)	0.628
Brooklyn	81.4 (72.8, 87.7)	0.911
Manhattan	80.8 (72.0, 87.3)	Reference
Queens	78.8 (68.1, 86.6)	0.742
Staten Island	98.4 (88.2, 99.8) <sup>*</sup>	<b>&lt;0.001</b>
<b>Household poverty<math>\times</math></b>		
<100% FPL	79.9 (72.8, 85.6)	Reference
100% - <200% FPL	83.1 (74.3, 89.3)	0.529
200% - <400% FPL	81.3 (66.8, 90.4) <sup>*</sup>	0.842
400% - <600% FPL	68.2 (48.0, 88.3) <sup>*</sup>	0.236
>= 600% FPL	82.1 (55.7, 94.3) <sup>*</sup>	0.835
<b>Neighborhood poverty<math>\S</math></b>		
Low/medium poverty	80.0 (72.1, 86.0)	Reference
High/very high poverty	82.4 (76.5, 87.1)	0.577
<b>Health insurance coverage</b>		
Yes	83.6 (78.8, 87.5)	Reference
No	69.6 (54.0, 81.7) <sup>*</sup>	0.063
<b>Health insurance type</b>		
Private	83.5 (74.1, 90.0) <sup>D</sup>	Reference
Medicare	78.5 (63.0, 88.6) <sup>*D</sup>	0.510
Medicaid	87.4 (80.8, 92.0)	0.425
Others	87.0 (60.4, 96.7) <sup>*</sup>	0.716
Uninsured	69.6 (54.0, 81.7) <sup>*</sup>	0.091
<b>Place of birth</b>		
US born	87.0 (81.8, 90.9)	Reference
Born outside the US	74.7 (66.6, 81.5)	<b>0.006</b>

<sup>1</sup>White, Black, Asian/Pacific Islander race categories exclude Latino ethnicity. Latino includes Hispanic or Latino 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.

<sup>U</sup> When rounding to the nearest whole number, round up.

<sup>D</sup> When rounding to the nearest whole number, round down

$\pm$  Measure of statistical significance of t-test. Bold p-values indicate that the estimate is statistically different from the reference group.

$\times$  Household poverty is measured as the total income of the household and is categorized into five groups, relative to the Federal Poverty Line (FPL), as follows: Very high poverty (<100% FPL), High poverty (100%-<200% FPL), Medium poverty (200%-<400% FPL), Low poverty (400%-600% FPL) and Very low poverty (>=600% FPL).

$\S$ Neighborhood poverty (based on ZIP code) was defined as percent of residents with incomes below 100% of the federal poverty level (FPL, based on American Community Survey 5-year files), separated into four groups: low (<10% FPL), medium (10%-<20% FPL), high (20%-<30% FPL) and very high (>=30% FPL).

**Table 2. Prevalence of serious psychological distress (SPD) by United Hospital Fund neighborhood in New York City, 2009-10 and 2012**

Source: NYC Community Health Survey (CHS), 2009,2010,2012. CHS has included adults with landline phones since 2002 and, starting in 2009, also has included adults who can be reached by cell phone.

Starting in 2009, data are weighted to the 2008 HVS for phone usage and the Census 2000. CHS 2012 data are weighted to the adult residential population per American Community Survey, 2011.

Data are age-adjusted to the US 2000 Standard Population.

Borough	United Hospital Fund neighborhood number	United Hospital Fund neighborhood name	Prevalence (95% Confidence Interval)
<b>Bronx</b>			
	101	Kingsbridge	2.8 (1.6, 4.7)
	102	Northeast Bronx	5.3 (3.7, 7.7)
	103	Fordham-Bronx Park	6.5 (4.7, 8.8) <sup>D</sup>
	104	Pelham	5.8 (4.1, 8.3)
	105	Crotona-Tremont	8.5 (6.5, 11.1) <sup>U</sup>
	106	High Bridge-Morrisania	6.4 (4.7, 8.8)
	107	Hunts Point-Mott Haven	9.8 (7.2, 13.3)
<b>Brooklyn</b>			
	201	Greenpoint	7.5 (4.6, 12.0) <sup>U</sup>
	202	Downtown-Heights-Slope	2.7 (1.5, 4.7)
	203	Bedford-Stuyvesant-Crown Heights	3.8 (2.4, 5.8)
	204	East New York	4.6 (2.9, 7.3)
	205	Sunset Park	4.2 (2.6, 6.6)
	206	Borough Park	5.4 (3.7, 7.6)
	207	East Flatbush-Flatbush	4.2 (2.6, 6.7)
	208	Canarsie	5.3 (3.7, 7.6)
	209	Bensonhurst-Bay Ridge	5.7 (3.7, 8.7)
	210	Coney Island	9.8 (7.3, 13.0)
	211	Williamsburg	6.4 (4.5, 8.9)
<b>Manhattan</b>			
	301	Washington Heights	6.0 (4.1, 8.8)
	302	Central Harlem-Morningside Heights	5.2 (3.4, 7.9)
	303	East Harlem	6.6 (4.4, 9.9)
	304	Upper West Side	3.8 (2.1, 6.7)
	305	Upper Eastside	4.1 (2.5, 6.8)
	306	Chelsea-Clinton	2.3 (1.4, 3.9)
	307	Gramercy Park-Murray Hill	5.4 (2.5, 11.2) <sup>*</sup>
	308	Greenwich Village-Soho	4.5 (2.1, 9.5) <sup>U*</sup>
	309	Union Square, Lower East Side	4.9 (3.2, 7.4)
	310	Lower Manhattan	1.1 (0.4, 3.1) <sup>*</sup>
<b>Queens</b>			
	401	Long Island City, Astoria	5.7 (3.8, 8.6)
	402	West Queens	4.3 (3.0, 6.1)
	403	Flushing-Clearview	3.5 (2.3, 5.4) <sup>U</sup>
	404	Bayside-Little Neck	2.2 (0.8, 6.0) <sup>*</sup>
	405	Ridgewood-Forest Hills	3.5 (2.4, 5.0) <sup>D</sup>
	406	Fresh Meadows	3.4 (2.0, 5.5)
	407	Southwest Queens	6.4 (4.5, 8.9)
	408	Jamaica	4.8 (3.2, 7.0)
	409	Southeast Queens	2.3 (1.3, 4.0)
	410	Rockaway	6.1 (3.8, 9.6)
<b>Staten Island</b>			
	501	Port Richmond	3.9 (2.0, 7.5) <sup>*</sup>
	502	Stapleton-St. George	4.2 (2.6, 6.9)
	503	Willowbrook	4.4 (2.3, 8.0) <sup>*</sup>
	504	South Beach - Tottenville	4.7 (3.0, 7.5)

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

The United Hospital Fund (UHF) classifies New York City into 42 neighborhoods, comprised of contiguous ZIP codes.

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

<sup>U</sup> When rounding to the nearest whole number, round up.

<sup>D</sup> When rounding to the nearest whole number, round down.



**Table 3a. Prevalence of access to mental health care among New York City adults aged 18 years and older with serious psychological distress (SPD), 2015**

Source: NYC Community Health Survey (CHS), 2015

CHS has included adults with landline phones since 2002 and, starting in 2009, also has included adults who can be reached by cell phone. CHS 2015 data are weighted to the adult residential population per the American Community Survey, 2014.

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

	Among those with SPD	
	Prevalence (95% Confidence Interval)	p-value $\pm$
<b>Overall</b>	45.9 (39.9, 52.0)	N/A
<b>Sex</b>		
Male	34.4 (27.4, 42.2)	Reference
Female	54.2 (45.9, 62.3)	<b>&lt;0.001</b>
<b>Age group (years)</b>		
18-24	35.0 (18.3, 56.3) *	Reference
25-44	36.5 (26.3, 48.0) * <sup>u</sup>	0.895
45-64	60.1 (51.8, 67.9)	<b>0.022</b>
65+	51.2 (38.6, 63.8) *	0.178
<b>Race/ethnicity<sup>1</sup></b>		
White	43.8 (32.3, 56.1) *	Reference
Black	35.2 (24.8, 47.2) *	0.307
Latino	51.1 (42.6, 59.4)	0.339
Asian/Pacific Islander	41.8 (23.5, 62.7) *	0.868
<b>Health insurance coverage</b>		
Yes	49.2 (42.4, 55.9)	Reference
No	29.8 (16.3, 48.2) *	<b>0.033</b>
<b>Health insurance type</b>		
Private	33.0 (23.5, 44.1) *	Reference
Medicare	64.1 (44.6, 79.8) *	<b>0.004</b>
Medicaid	54.2 (44.0, 64.1) *	<b>0.004</b>
Other	49.6 (26.7, 72.6) *	0.228
Uninsured	29.8 (16.3, 48.2) *	0.746
<b>Place of birth</b>		
US-born	50.2 (43.0, 57.4)	Reference
Born outside the US	41.4 (32.1, 51.4)	0.159

<sup>1</sup>White, Black, Asian/Pacific Islander race categories exclude Latino ethnicity. Latino includes Hispanic or Latino of any race.

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

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

<sup>u</sup> When rounding to the nearest whole number, round up.

$\pm$  Measure of statistical significance of t-test. Bold p-values indicate that the estimate is statistically different from the reference group.

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

**Table 3b. Prevalence of unmet need for mental health care among New York City adults aged 18 years and older by serious psychological distress (SPD) , 2015**

Source: NYC Community Health Survey (CHS), 2015

CHS has included adults with landline phones since 2002 and, starting in 2009, also has included adults who can be reached by cell phone. CHS 2015 data are weighted to the adult residential population per the American Community Survey, 2014.

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

Survey question:

Was there a time in the past 12 months when you needed treatment for a mental health problem but did not get it?

	SPD		Without SPD	
	Prevalence (95% Confidence Interval)	p-value $\pm$	Prevalence (95% Confidence Interval)	p-value $\pm$
<b>Overall</b>	23.0 (17.6, 29.4)	N/A	2.4 (2.0, 2.8)	N/A
<b>Sex</b>				
Male	20.7 (13.9, 29.7)	Reference	2.1 (1.6, 2.8)	Reference
Female	24.6 (17.7, 33.3)	0.490	2.6 (2.0, 3.2)	0.283
<b>Race/ethnicity<sup>1</sup></b>				
White	35.1 (23.4, 48.9) *	Reference	2.7 (2.0, 3.6)	Reference
Black	15.6 (9.5, 24.8)	<b>0.011</b>	2.3 (1.5, 3.4)	0.502
Latino	16.9 (11.8, 23.6)	<b>0.012</b>	2.7 (2.0, 3.7)	0.964
Asian	22.9 (8.4, 48.9) *	0.327	0.6 (0.3, 1.1) *	<b>&lt;0.001</b>
<b>Household poverty<math>\mp</math></b>				
<200% FPL	21.5 (16.1, 28.2) <sup>D</sup>	0.424	2.3 (1.8, 3.0)	0.970
>=200% FPL	27.2 (16.6, 41.3) *	Reference	2.4 (1.8, 3.1)	Reference
<b>Health insurance coverage</b>				
Yes	23.2 (17.2, 30.6)	Reference	2.1 (1.7, 2.6)	Reference
No	29.5 (16.4, 47.3) <sup>*D</sup>	0.471	3.2 (2.0, 5.1)	0.155
<b>Health insurance type</b>				
Private	19.1 (12.3, 28.5)	Reference	2.3 (1.7, 3.0)	Reference
Medicare	8.1 (4.4, 14.6) *	<b>0.023</b>	1.7 (0.8, 3.4) *	0.400
Medicaid	27.1 (18.9, 37.2)	0.203	2.0 (1.4, 2.7)	0.502
Uninsured	29.5 (16.4, 47.3) <sup>*D</sup>	0.251	3.2 (2.0, 5.1)	0.241
<b>Place of birth</b>				
US-born	27.2 (20.4, 35.3)	Reference	3.1 (2.4, 3.8)	Reference
Born outside the US	20.3 (12.4, 31.6)	0.268	1.6 (1.2, 2.2)	<b>0.001</b>
<b>Among all adults, needed treatment for a mental health problem but did not get in the past 12 months</b>				
US-born	4.3 (3.6, 5.2)	Reference		
Born outside the US	2.6 (2.0, 3.5)	<b>0.002</b>		

<sup>1</sup>White, Black, Asian/Pacific Islander race categories exclude Latino ethnicity. Latino includes Hispanic or Latino of any race.

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

<sup>U</sup> When rounding to the nearest whole number, round up.

<sup>D</sup> When rounding to the nearest whole number, round down

$\pm$  Measure of statistical significance of t-test. Bold p-values indicate that the estimate is statistically different from the reference group.

$\mp$  Household poverty is measured as the total income of the household and is categorized into two groups, relative to the Federal Poverty Line (FPL), as follows: High poverty (<200% FPL), Low poverty (>=200% FPL).

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

**Table 4. Prevalence of comorbidities and health behaviors among New York City adults aged 18 years and older, by serious psychological distress (SPD) status, 2015**

Source: NYC Community Health Survey (CHS), 2015

CHS has included adults with landline phones since 2002 and, starting in 2009, also has included adults who can be reached by cell phone. CHS 2015 data are weighted to the adult residential population per the American Community Survey, 2014.

Data are age-adjusted to the US 2000 Standard Population

	<b>SPD</b> <b>Prevalence</b> <b>(95% Confidence</b> <b>Interval)</b>	<b>Without SPD (Reference)</b> <b>Prevalence</b> <b>(95% Confidence</b> <b>Interval)</b>	<b>p-value<sup>±</sup></b>
Fair or poor health	57.6 (51.9, 63.2)	20.6 (19.5, 21.6)	<b>&lt;0.001</b>
Had primary care provider	86.4 (82.2, 89.8)	83.6 (82.5, 84.7)	0.165
Hypertension	44.1 (39.0, 49.4)	27.9 (26.9, 28.9)	<b>&lt;0.001</b>
Diabetes	19.7 (16.2, 23.8)	11.1 (10.3, 11.9)	<b>&lt;0.001</b>
Obesity	33.7 (28.2, 39.7)	23.6 (22.4, 24.8)	<b>0.001</b>
2+ chronic diseases <sup>†</sup>	30.0 (25.1, 35.3)	15.7 (14.8, 16.6)	<b>&lt;0.001</b>
Current smoking	30.5 (25.2, 36.4) <sup>U</sup>	13.3 (12.4, 14.4)	<b>&lt;0.001</b>
No physical activity in the past 30 Days	39.2 (33.7, 45.0)	24.7 (23.5, 25.9)	<b>&lt;0.001</b>
Zero fruits and vegetables yesterday	18.7 (14.7, 23.4)	11.7 (10.8, 12.7)	<b>0.002</b>
2+ unhealthy behaviors <sup>‡</sup>	20.9 (16.6, 25.8)	9.2 (8.4, 10.1)	<b>&lt;0.001</b>

<sup>U</sup> When rounding to the nearest whole number, round up.

<sup>D</sup> When rounding to the nearest whole number, round down.

95% Confidence Intervals are a measure of estimate precision: the wider the CI, the more imprecise the estimate.

<sup>±</sup> Measure of statistical significance of t-test. Bold p-values indicate that the estimate is statistically different from the reference group.

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

<sup>†</sup> Includes chronic conditions of hypertension, diabetes and obese

<sup>‡</sup> Includes unhealthy behaviors of current smoking, no physical activity in past 30 days and zero fruits and vegetables yesterday

**Table 5. Prevalence of comorbidities and health behaviors among New York City adults aged 18 years and older, by serious psychological distress (SPD) status, 2002-2013, 2015<sup>1</sup>**

Source: NYC Community Health Survey (CHS), 2002-2003, 2005-2006, 2008-2010, 2012-2013 and 2015. CHS has included adults with landline phones since 2002 and, starting in 2009, also has included adults who can be reached by cell phone.

CHS 2002-2008 data are weighted to the NYC adult population per Census 2000; starting in 2009, data are weighted to the 2008 HVS for phone usage and the Census 2000. CHS 2012 data are weighted to the adult residential population per American Community Survey, 2011. CHS 2013 data are weighted to the adult residential population per the American Community Survey, 2012. CHS 2015 data are weighted to the adult residential population per the American Community Survey, 2014.

Data are age-adjusted to the US 2000 Standard Population.

	2002	2003	2005	2006	2008	2009	2010	2012	2013	2015	Linear Trend P-value <sup>2</sup>
	Prevalence (95% Confidence Interval)	Prevalence (95% Confidence Interval)	Prevalence (95% Confidence Interval)	Prevalence (95% Confidence Interval)	Prevalence (95% Confidence Interval)	Prevalence (95% Confidence Interval)	Prevalence (95% Confidence Interval)	Prevalence (95% Confidence Interval)	Prevalence (95% Confidence Interval)	Prevalence (95% Confidence Interval)	
<b>Current asthma<sup>3</sup></b>											
SPD	11.0 (8.5, 14.2)	11.6 (8.7, 15.4)	N/A	16.4 (12.9, 20.7)	11.6 (8.0, 16.6)	11.7 (7.9, 17.2)	10.3 (7.0, 14.7)	13.1 (9.2, 18.4)	11.8 (8.5, 16.1)	N/A	0.947
Without SPD	3.9 (3.4, 4.5)	4.3 (3.8, 4.8)	N/A	4.5 (4.0, 5.1) <sup>u</sup>	4.9 (4.2, 5.6)	3.7 (3.2, 4.3)	3.4 (2.9, 4.0)	4.1 (3.5, 4.7)	3.5 (3.0, 4.0) <sup>D</sup>	N/A	0.055
<b>High cholesterol<sup>†</sup></b>											
SPD	32.8 (28.5, 37.4)	N/A	N/A	N/A	45.2 (38.7, 51.8)	N/A	43.6 (36.9, 50.4)	40.9 (34.8, 47.3)	41.9 (36.3, 47.7)	N/A	<b>0.008</b>
Without SPD	25.8 (24.6, 27.0)	N/A	N/A	N/A	31.3 (30.1, 32.6)	N/A	29.2 (27.9, 30.5)	28.3 (27.0, 29.7)	29.2 (28.0, 30.5)	N/A	<b>&lt;0.001</b>
<b>Diabetes</b>											
SPD	13.2 (10.5, 16.5)	16.5 (12.8, 21.1) <sup>u</sup>	N/A	16.3 (13.4, 19.8)	17.5 (13.6, 22.1) <sup>D</sup>	15.2 (11.8, 19.5)	15.6 (12.0, 20.1)	18.6 (14.1, 24.2)	17.8 (14.1, 22.3)	19.7 (16.2, 23.8)	<b>0.027</b>
Without SPD	7.6 (7.0, 8.3)	8.6 (7.9-9.3)	N/A	9.0 (8.3, 9.6)	9.2 (8.4, 10.0)	9.4 (8.7, 10.1)	8.9 (8.2, 9.7)	10.2 (9.4, 11.1)	10.4 (9.6, 11.3)	11.1 (10.3, 11.9)	<b>&lt;0.001</b>
<b>Obesity</b>											
SPD	24.5 (20.2, 29.3) <sup>D</sup>	29.7 (24.6, 35.3)	27.4 (23.2, 32.0)	26.3 (22.4, 30.7)	31.9 (26.5, 37.9)	33.5 (27.4, 40.3) <sup>u</sup>	32.7 (26.1, 40.0)	33.4 (26.8, 40.7)	33.0 (28.0, 38.5)	33.7 (28.2, 39.7)	<b>0.002</b>
Without SPD	17.9 (16.9, 18.9)	19.7 (18.7, 20.7)	19.4 (18.5, 20.4)	20.6 (19.6, 21.7)	22.0 (20.8, 23.3)	22.7 (21.5, 24.0)	22.9 (21.6, 24.3)	23.6 (22.3, 25.0)	22.9 (21.6, 24.1)	23.6 (22.4, 24.8)	<b>&lt;0.001</b>
<b>Hypertension</b>											
SPD	35.6 (31.1, 40.4)	N/A	46.5 (41.7, 51.4) <sup>u</sup>	38.3 (33.7, 43.2)	44.1 (38.4, 50.0)	40.4 (34.4, 46.6)	44.3 (37.3, 51.4)	41.5 (35.4, 47.9) <sup>u</sup>	43.2 (37.7, 48.9)	44.1 (39.0, 49.4)	0.078
Without SPD	25.3 (24.3, 26.4)	N/A	27.8 (26.8, 28.8)	25.2 (24.2, 26.2)	27.8 (26.7, 29.1)	27.7 (26.6, 28.8)	27.8 (26.6, 29.0)	27.0 (25.8, 28.2)	28.2 (27.1, 29.3)	27.9 (26.8, 28.9)	<b>&lt;0.001</b>
<b>Fair or poor Health</b>											
SPD	54.6 (49.8, 59.3)	57.6 (52.2, 62.9)	57.6 (52.9, 62.2)	54.7 (49.8, 59.5)	52.2 (46.2, 58.2)	46.3 (40.9, 51.8)	51.9 (44.5, 59.2)	50.1 (43.6, 56.5)	59.3 (53.4, 64.9)	57.6 (51.9, 63.2)	0.774
Without SPD	17.1 (16.1, 18.1)	19.1 (18.1, 20.1)	20.2 (19.2, 21.3)	19.1 (18.2, 20.1)	18.4 (17.3, 19.5)	18.0 (17.0, 19.1)	19.4 (18.2, 20.7)	19.5 (18.4, 20.8) <sup>u</sup>	21.0 (19.9, 22.2)	20.5 (19.5, 21.6) <sup>u</sup>	<b>&lt;0.001</b>
<b>Zero fruits and vegetables yesterday</b>											
SPD	25.7 (21.5, 30.4)	N/A	N/A	N/A	29.0 (22.9, 35.8)	22.8 (18.2, 28.2)	23.4 (17.0, 31.1)	22.4 (16.7, 29.4)	22.1 (17.4, 27.7)	18.7 (14.7, 23.4)	<b>0.018</b>
Without SPD	13.5 (12.6, 14.5) <sup>u</sup>	N/A	N/A	N/A	12.0 (11.0, 13.2)	11.8 (10.7, 12.9)	11.1 (10.1, 12.3)	11.9 (10.8, 13.1)	12.4 (11.4, 13.5)	11.7 (10.8, 12.7)	<b>0.016</b>
<b>No physical activity</b>											
SPD	46.9 (41.9, 51.9)	54.9 (49.5, 60.2)	44.9 (40.0, 49.9)	N/A	44.0 (37.2, 51.1)	43.2 (36.8, 49.9)	53.1 (44.8, 61.3)	41.4 (34.1, 49.2)	41.7 (35.5, 48.3)	39.2 (33.7, 45.0)	<b>0.001</b>
Without SPD	24.9 (23.7, 26.1)	34.5 (33.3, 35.8) <sup>u</sup>	28.1 (27.0, 29.2)	N/A	26.3 (24.9, 27.7)	26.4 (25.1, 27.7)	26.1 (24.7, 27.6)	21.2 (19.9, 22.5)	24.8 (23.6, 26.1)	24.7 (23.5, 25.9)	<b>&lt;0.001</b>
<b>Current smoking</b>											
SPD	29.1 (24.9, 33.8)	30.6 (26.0, 35.6)	34.6 (30.2, 39.3)	32.2 (27.6, 37.1)	28.4 (22.4, 35.3)	29.9 (23.9, 36.8)	27.3 (20.3, 35.6)	35.9 (28.7, 43.8)	31.1 (25.7, 37.1)	30.5 (25.2, 36.4) <sup>u</sup>	0.805
Without SPD	21.0 (20.0, 22.1)	19.6 (18.6, 20.6)	17.8 (16.8, 18.8)	16.6 (15.6, 17.6)	15.1 (13.9, 16.4)	15.0 (13.9, 16.2)	13.4 (12.2, 14.6)	14.4 (13.2, 15.6)	15.2 (14.2, 16.4)	13.3 (12.4, 14.4)	<b>&lt;0.001</b>

<sup>u</sup> When rounding to the nearest whole number, round up.

<sup>D</sup> When rounding to the nearest whole number, round down.

95% Confidence Intervals are a measure of estimate precision: the wider the CI, the more imprecise the estimate.

<sup>1</sup>Serious psychological distress questions were not asked in CHS 2004, 2007, 2011 and 2014, and the unequal time point linear trend test was performed to assess the linear trend over time.

<sup>2</sup> The linear trends of the prevalence of asthma and self-reported cholesterol were from 2002 to 2013.

<sup>3</sup> The "Current Asthma" was asked among those who had been told by a doctor, nurse or other health professional that they had asthma from 2002 to 2013.

<sup>†</sup>Data on cholesterol is only available from 2002 to 2013.

Bold p-values indicate statistically significant linear trends across years (p <0.05).