



Epi Data Tables

New York City Department of Health and Mental Hygiene

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Muscle-strengthening Activity among New Yorkers

Data Tables

- Table 1. Meeting muscle-strengthening guidelines, NYC adults and youth, 2011**
- Table 2. Meeting both muscle-strengthening and physical activity guidelines, NYC adults and youth, 2011**
- Table 3. Support for muscle-strengthening activity among NYC adults and youth, 2011**

Data Sources

The New York City Physical Activity and Transit Survey (PAT) 2011 was a telephone survey conducted by the Health Department to better understand patterns of physical activity and other factors that facilitate a healthy lifestyle. Data presented in this Brief are from 2,488 adults aged 18 and older who completed wave two of the survey; data are age adjusted to the US 2000 Standard population, except for age-specific estimates. PAT was supported by funding from the US Department of Health and Human Services.

New York City Youth Risk Behavior Survey (NYC YRBS) 2011: Data on NYC students in grades 9 through 12 (also referred to here as "youth") are from the 2011 NYC YRBS, a self-administered, anonymous survey conducted in NYC public high schools by the Health Department and the NYC Department of Education. For more survey details, visit <http://www.nyc.gov/html/doh/html/data/youth-risk-behavior.shtml>.

[To access the related Epi Data Brief, go to nyc.gov/html/doh/downloads/pdf/epi/databrief39.pdf](http://www.nyc.gov/html/doh/downloads/pdf/epi/databrief39.pdf)



Table 1. Meeting muscle-strengthening guidelines, NYC adults and youth, 2011

Source: 2011 Physical Activity and Transit Survey, 2011 NYC Youth Risk Behavior Survey

	Adults (18 years of age or older)			Youth (public high school students)		
	Percent	95% Confidence Interval	P-value	Percent	95% Confidence Interval	P-value
NYC Total	29.7	(27.0 - 32.6)	--	49.7	(46.6 - 52.8)	--
Gender						
Female	23.2	(19.9 - 26.9)	ref	41.7	(38.4 - 45.0)	ref
Male	36.7	(32.6 - 41.0)	<0.01	58.5 ^D	(55.5 - 61.5)	<0.01
Age Group						
18-24	34.7	(26.3 - 44.2)				
25-44	31.8	(27.0 - 36.9)				
45-64	29.0	(24.8 - 33.6)	<0.01			
65+	22.3	(18.0 - 27.4)				
Grade Level						
9th grade				51.2	(46.5 - 55.8)	
10th grade				49.0	(44.7 - 53.3)	
11th grade				53.1	(48.9 - 57.3)	0.09
12th grade				44.8	(40.4 - 49.3)	
Race/Ethnicity						
White, non-Hispanic	33.5 ^U	(28.7 - 38.7)	ref	52.3	(47.3 - 57.2)	ref
Black, non-Hispanic	37.3	(31.8 - 43.1)	0.33	49.5 ^D	(46.0 - 52.9)	0.34
Hispanic	19.4	(15.1 - 24.5)	<0.01	50.9	(48.8 - 54.9)	0.60
Asian, non-Hispanic	22.9	(16.0 - 31.6)	0.02	44.4	(38.4 - 50.6)	0.02
Other, non-Hispanic	38.8*	(23.3 - 57.0)	0.57	52.4	(47.2 - 57.5)	0.98
Household Income (% of FPL)[†]						
<100% FPL (lowest income)	20.0	(15.0 - 26.0)				
100 to 200% FPL	27.8	(21.5 - 35.2)				
200 to 400% FPL	32.7	(25.5 - 40.7)	<0.01			
400 to 600% FPL	36.5 ^D	(29.5 - 44.1)				
>600% FPL (highest income)	45.5 ^U	(38.8 - 52.4)				
Education[^]						
Less than High School	17.0	(11.6 - 24.3)				
High School Graduate	24.2	(19.1 - 30.1)				
Some College	32.4	(26.0 - 39.6)	<0.01			
College Graduate	36.7	(32.1 - 41.5)				
Level of aerobic activity						
Does not meet national guidelines	12.7	(9.2 - 17.4)	ref	41.9	(38.9 - 45.0)	ref
Meets guidelines	36.2	(32.9 - 39.7)	<0.01	79.4	(75.9 - 82.5)	<0.01

2008 Physical Activity Guidelines for Americans:

Adults should do at least 150 minutes (two hours and 30 minutes) a week of moderate-intensity, or 75 minutes (one hour and 15 minutes) a week of vigorous-intensity aerobic physical activity, or an equivalent combination of moderate- and vigorous-intensity aerobic activity. Aerobic activity should be performed in episodes of at least 10 minutes, and preferably, it should be spread throughout the week. Adults should also do muscle-strengthening activities that are moderate or high intensity and involve all major muscle groups on two or more days a week.

Children and adolescents should do 60 minutes (one hour) or more of physical activity daily. Most of the 60 or more minutes a day should be either moderate- or vigorous-intensity aerobic physical activity, and should include vigorous-intensity physical activity at least three days a week. As part of their 60 or more minutes of daily physical activity, children and adolescents should include muscle-strengthening physical activity on at least three days of the week.

Except for age-specific estimates, data for adults are age-adjusted to the United States 2000 Standard Population. 95% confidence intervals are a measure of estimate precision. The wider the interval the more imprecise the estimate. P values are reported for significance tests for trends for ordinal variables (age, grade, education, income) and T-tests for difference from reference for categorical variables. P values of < 0.05 are bolded.

*Estimate should be interpreted with caution. The relative standard error (a measure of estimate precision) is greater than 30, making the estimate potentially unreliable.

[†]FPL: Federal poverty level

[^]Analysis of education is restricted to NYC adults aged 25 and older

^U When rounding to the nearest whole number, estimate rounds up

^D When rounding to the nearest whole number, estimate rounds down

Table 2. Meeting both muscle-strengthening and physical activity guidelines, NYC adults and youth, 2011

Source: 2011 Physical Activity and Transit Survey, 2011 NYC Youth Risk Behavior Survey

	Adults (18 years of age or older)			Youth (public high school students)		
	Percent	95% Confidence Interval	P-value	Percent	95% Confidence Interval	P-value
NYC Total	26.1	(23.5 - 28.9)	--	16.3	(15.0 - 17.6)	--
Gender						
Female	19.9	(16.9 - 23.4)	ref	10.1	(8.9 - 11.6)	ref
Male	32.8	(28.7 - 37.1)	<0.01	23.1	(21.2 - 25.1)	<0.01
Age Group						
18-24	30.5 ^U	(22.6 - 39.9)	<0.01			
25-44	29.0	(24.4 - 34.0)				
45-64	25.3	(21.3 - 29.7)				
65+	17.5 ^D	(13.5 - 22.3)				
Grade Level						
9th grade				18.2	(16.3 - 20.3)	<0.01
10th grade				15.9	(13.8 - 18.2)	
11th grade				17.8	(16.2 - 19.5)	
12th grade				12.4	(10.4 - 14.7)	
Race/Ethnicity						
White, non-Hispanic	31.4	(26.6 - 36.6)	ref	19.6	(16.6 - 23.0)	ref
Black, non-Hispanic	31.7	(26.4 - 37.6)	0.92	16.1	(14.7 - 17.6)	0.04
Hispanic	16.1	(12.5 - 20.7)	<0.01	15.9	(14.1 - 17.8)	<0.05
Asian, non-Hispanic	19.4	(13.2 - 27.5)	<0.01	13.0	(9.7 - 17.1)	0.01
Other, non-Hispanic	26.9*	(14.9 - 43.7)	0.57	16.0	(12.9 - 22.0)	0.35
Household Income (% of FPL)†						
<100% FPL (lowest income)	17.4	(12.7 - 23.3)	<0.01			
100 to 200% FPL	22.3	(16.6 - 29.2)				
200 to 400% FPL	27.3	(20.8 - 34.9)				
400 to 600% FPL	33.6	(26.7 - 41.2)				
>600% FPL (highest income)	43.6	(36.9 - 50.5)				
Education^						
Less than High School	13.1	(8.4 - 19.9)	<0.01			
High School Graduate	20.8	(16.0 - 26.6)				
Some College	27.9	(21.9 - 34.9)				
College Graduate	33.6	(29.1 - 38.4)				

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Table 3. Support for muscle-strengthening activity among NYC adults and youth, 2011

Source: 2011 Physical Activity and Transit Survey, 2011 NYC Youth Risk Behavior Survey

	Adults (18 years of age or older)			Youth (public high school students)		
	Percent	95% Confidence Interval	P-value	Percent	95% Confidence Interval	P-value
NYC Total	29.7	(27.0 - 32.6)	--	49.7	(46.6 - 52.8)	--
Participate in team sports						
No				41.4	(37.2 - 45.8)	ref
Yes				60.9	(58.0 - 63.6)	<0.01
Frequency of PE classes at school						
None or less than every day				40.9	(37.8 - 44.1)	ref
Every day				62.4	(57.4 - 67.1)	<0.01
Had a gym membership in the past 12 months						
No	22.3	(19.3 - 25.7)	ref			
Yes	48.0	(42.6 - 53.4)	<0.01			
Friends are physically active						
No	17.0	(12.7 - 22.3)	ref			
Yes	36.7	(33.2 - 40.4)	<0.01			
Family members are physically active						
No	23.8	(19.8 - 28.4)	ref			
Yes	33.0	(29.5 - 36.8)	<0.01			
Neighbors are physically active						
No	18.6	(14.6 - 23.5)	ref			
Yes	35.5 ^U	(30.9 - 40.4)	<0.01			
Admire people who are physically active						
No	21.4	(17.3 - 26.1)	ref			
Yes	35.8	(32.1 - 39.6)	<0.01			

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