

SUPPLEMENTAL MATERIAL

Data S1.

Supplemental Methods (Propensity score matching)

We used propensity score matching to estimate the average marginal effect of cannabis use on those who used cannabis daily compared to no use accounting for confounding by including combustible tobacco use, alcohol use as well as demographic, socioeconomic, and other cardiovascular risk factors. Cannabis users were matched to non-cannabis users (in a 1:1 ratio) based smoking status (current, former, never use), alcohol use frequency (daily, non-daily, non-use), age category (18-34, 35-64, 65+ years), sex, race, education status, BMI category (<18.5, 18.5-25, 25-30, 30+ kg/m²), diabetes, and physical activity, using a caliper of width of 0.2 times the standard deviation of the linearized logit of the propensity score using a greedy nearest neighbor algorithm without replacement. After matching, the sample was well balanced with all standardized mean differences for covariates below 0.015 (see Figure R1 below). One-to-one nearest neighbor matching used all of the treated units, 32,701, and the same number of control units, leaving 321,805 unmatched control units and an analytic sample size of 65,402. To estimate the effect of cannabis use and its standard error, we fit a logistic regression model using matching and survey weights and R's `glm()` function. The `avg_comparisons()` function in the `marginalEffects` package was used to perform g-computation in the matched sample to estimate ATT (average treatment effect on the treated) among daily cannabis users. A cluster-robust variance was used to estimate its standard error with matching stratum membership as the clustering variable.

Table S1: Data availability by state and year and legality of cannabis. White means illegal cannabis, grey is legal medical cannabis only, and black is legal recreational and medical cannabis.

State	Year				
	2016	2017	2018	2019	2020
Alaska	R	R	--*	--	R
California	M	R	R	R	--
Colorado	R	--	--	--	--
Delaware	--	--	--	--	M
Florida	I	--	M	--	--
Georgia	--	I	--	--	--
Guam	--	M	M	R	R
Hawaii	--	--	--	--	M
Idaho	I	I	I	I	I
Illinois	--	--	--	M	R
Indiana	--	--	--	--	I
Kentucky					I
Maine	--	--	--	--	R
Maryland	--	--	M	M	M
Minnesota	M	M	M	M	M
Mississippi	I	--	--	--	I
Montana	--	--	M	--	--
Nebraska	I	--	--	--	I
New Hampshire	--	M	M	M	M
North Dakota	--	--	M	M	M
Ohio	M [†]	--	M	--	M
Oklahoma	I	I	M	M	M
Puerto Rico	--	M	M	--	--
Rhode Island	--	--	--	--	M
South Carolina	--	I	I	I	I
Tennessee	I	I	I	I	I
Utah	--	--	--	M	M
West Virginia	--	--	I	M	M
Wyoming	I	I	I	I	I
I = cannabis is illegal					
M = medical cannabis is legal					
R = recreational and medical cannabis are legal					
*-- represents the BRFSS cannabis module was not asked in that state in that year					
†Medical cannabis became legal in Ohio in June 2016					

Table S2: BRFSS survey questions used in analysis

Variable	BRFSS Question
Age	What is your age?
Sex	Are you? ... Male, Female, Refused
Race	Which of these groups would you say best represents your race? ... White, Black or African American, American Indian or Alaska Native, Asian, Pacific Islander
Ethnicity	Are you Hispanic, Latino/a, or Spanish origin?
Education	What is the highest grade or year of school you completed?
Height	About how tall are you without shoes?
Weight	About how much do you weigh without shoes?
Diabetes	Has a doctor, nurse, or other health professional EVER told you that you had any of the following? ... (Ever told) you have diabetes?
Alcohol use	During the past 30 days, how many days per week or per month did you have at least one drink of any alcoholic beverage such as beer, wine, a malt beverage or liquor?
Physical activity	During the past month, other than your regular job, did you participate in any physical activities or exercises such as running, calisthenics, golf, gardening, or walking for exercise?
Cannabis use	During the past 30 days, on how many days did you use marijuana or hashish?
Tobacco cigarette use	Have you smoked at least 100 cigarettes in your entire life?
	Do you now smoke cigarettes every day, some days, or not at all?
Tobacco e-cigarette use	Have you ever used an e-cigarette or other electronic “vaping” product, even just one time, in your entire life?
	Do you now use e-cigarettes or other electronic “vaping” products every day, some days, or not at all?
Coronary heart disease	Has a doctor, nurse, or other health professional EVER told you that you had any of the following? ... (Ever told) you had angina or coronary heart disease?
Myocardial infarction	Has a doctor, nurse, or other health professional EVER told you that you had any of the following? ... (Ever told) you that you had a heart attack also called myocardial infarction?
Stroke	Has a doctor, nurse, or other health professional EVER told you that you had any of the following? ... (Ever told) you had a stroke?

Table S3: Adjusted odds ratio for the association between days of cannabis use per 30 days, tobacco cigarette use, and the interaction between current cannabis use and current tobacco use, with cardiovascular outcomes in BRFSS respondents ages 18-74.*

	CHD	MI	Stroke	Composite outcome of CHD, MI, Stroke
Cannabis Use [†]	1.21 (0.98, 1.50)	1.26 (1.05, 1.52)[‡]	1.30 (1.04, 1.63)	1.27 (1.10, 1.47)
Former Tobacco Smoker	1.73 (1.60, 1.87)	1.77 (1.64, 1.92)	1.47 (1.34, 1.61)	1.64 (1.55, 1.74)
Current Tobacco Smoker	1.96 (1.76, 2.19)	2.63 (2.37, 2.92)	2.04 (1.84, 2.25)	2.16 (2.00, 2.33)
Current cannabis use x Current tobacco cigarette use	0.92 (0.72, 1.16)	0.99 (0.80, 1.22)	1.17 (0.92, 1.49)	1.01 (0.86, 1.18)
Age per 10 years	1.86 (1.80, 1.92)	1.87 (1.81, 1.93)	1.62 (1.57, 1.67)	1.79 (1.75, 1.83)
Male	1.69 (1.58, 1.81)	2.07 (1.93, 2.22)	1.12 (1.04, 1.21)	1.56 (1.48, 1.64)
Black	0.71 (0.62, 0.82)	0.82 (0.72, 0.94)	1.51 (1.35, 1.68)	1.02 (0.93, 1.11)
Hispanic	0.78 (0.69, 0.88)	0.77 (0.67, 0.87)	0.64 (0.55, 0.75)	0.76 (0.69, 0.83)
Other	0.95 (0.79, 1.15)	0.99 (0.84, 1.17)	1.07 (0.91, 1.27)	1.00 (0.89, 1.14)
BMI	1.02 (1.02, 1.03)	1.02 (1.01, 1.02)	1.01 (1.00, 1.01)	1.02 (1.01, 1.02)
Diabetes	2.40 (2.21, 2.61)	2.28 (2.10, 2.46)	1.98 (1.81, 2.17)	2.26 (2.12, 2.40)
Non-Daily Alcohol Use	0.68 (0.63, 0.73)	0.67 (0.63, 0.73)	0.62 (0.57, 0.68)	0.66 (0.63, 0.70)
Daily Alcohol Use	0.75 (0.62, 0.90)	0.70 (0.59, 0.84)	0.72 (0.61, 0.85)	0.72 (0.64, 0.81)
High school diploma	0.79 (0.70, 0.90)	0.74 (0.66, 0.83)	0.75 (0.66, 0.85)	0.75 (0.69, 0.82)
Some college	0.82 (0.72, 0.94)	0.69 (0.61, 0.77)	0.73 (0.64, 0.83)	0.72 (0.66, 0.79)
College degree	0.68 (0.59, 0.78)	0.49 (0.44, 0.56)	0.53 (0.47, 0.61)	0.55 (0.50, 0.60)
Physical activity	0.75 (0.69, 0.81)	0.72 (0.67, 0.78)	0.64 (0.59, 0.69)	0.70 (0.66, 0.74)

* Adjusting for age, sex, race, BMI, diabetes, alcohol use, educational attainment, physical activity
[†] Days used in last 30 days divided by 30. Non-use scored as 0/30=0 and daily use scored 30/30=1, so aORs correspond to risk of daily use compared to non-use.
[‡] Boldface indicates statistical significance (p<0.05)
 BMI, body mass index; BRFSS, Behavioral Risk Factor Surveillance System; CHD, coronary heart disease; MI, myocardial infarction

Table S4: Adjusted odds ratio for the association between days of cannabis use per 30 days and cardiovascular outcomes in BRFSS respondents ages 18-74 who have never used tobacco cigarettes and e-cigarettes.*

	CHD	MI	Stroke	Composite outcome of CHD, MI, Stroke
Cannabis Use [†]	1.42 (0.86, 2.36)	1.49 (0.93, 2.38)	2.24 (1.31, 3.83) [‡]	1.63 (1.12, 2.38)
Age per 10 years	1.88 (1.77, 1.99)	1.87 (1.73, 2.02)	1.52 (1.43, 1.62)	1.72 (1.65, 1.80)
Male	1.67 (1.46, 1.91)	2.00 (1.73, 2.31)	1.02 (0.88, 1.18)	1.44 (1.31, 1.59)
Black	0.78 (0.61, 1.00)	1.00 (0.76, 1.30)	1.43 (1.16, 1.77)	1.08 (0.92, 1.27)
Hispanic	0.76 (0.60, 0.96)	0.74 (0.58, 0.93)	0.60 (0.45, 0.81)	0.71 (0.59, 0.84)
Other	0.77 (0.52, 1.14)	0.87 (0.61, 1.23)	0.61 (0.46, 0.81)	0.75 (0.58, 0.97)
BMI	1.03 (1.02, 1.04)	1.02 (1.00, 1.03)	1.02 (1.01, 1.03)	1.03 (1.02, 1.03)
Diabetes	2.37 (2.03, 2.76)	2.15 (1.84, 2.51)	2.10 (1.77, 2.49)	2.16 (1.93, 2.41)
Non-Daily Alcohol Use	0.78 (0.68, 0.90)	0.74 (0.64, 0.86)	0.63 (0.54, 0.73)	0.71 (0.64, 0.78)
Daily Alcohol Use	0.92 (0.68, 1.23)	0.60 (0.45, 0.80)	0.81 (0.57, 1.16)	0.82 (0.66, 1.01)
High school diploma	0.74 (0.54, 1.01)	0.70 (0.52, 0.94)	0.73 (0.54, 0.99)	0.68 (0.55, 0.84)
Some college	0.77 (0.56, 1.07)	0.66 (0.50, 0.88)	0.74 (0.55, 1.00)	0.68 (0.55, 0.84)
College degree	0.66 (0.47, 0.92)	0.49 (0.37, 0.65)	0.56 (0.41, 0.76)	0.54 (0.43, 0.67)
Physical activity	0.64 (0.55, 0.75)	0.61 (0.52, 0.72)	0.62 (0.53, 0.73)	0.63 (0.57, 0.70)
* Adjusting for tobacco cigarette use, age, sex, race, BMI, diabetes, alcohol use, educational attainment, physical activity				
[†] Days used in last 30 days divided by 30. Non-use scored as 0/30=0, use 15 days/month scored as 15/30=0.5, and daily use scored 30/30=1, so aORs correspond to risk of daily use compared to non-use.				
[‡] Boldface indicates statistical significance (p<0.05)				
BMI, body mass index; BRFSS, Behavioral Risk Factor Surveillance System; CHD, coronary heart disease; MI, myocardial infarction				

Table S5: Adjusted odds ratios of association between days of cannabis use per 30 days and cardiovascular outcomes in BRFSS respondents at risk for premature cardiovascular disease (men <55 years and women <65 years).*

	CHD	MI	Stroke	Composite outcome of CHD, MI, Stroke
Cannabis Use [†]	1.30 (1.00, 1.67) [‡]	1.30 (1.04, 1.62)	1.56 (1.25, 1.95)	1.36 (1.16, 1.61)
Former Smoker	1.64 (1.43, 1.89)	1.68 (1.46, 1.94)	1.40 (1.20, 1.62)	1.54 (1.40, 1.69)
Current Smoker	2.16 (1.86, 2.51)	2.55 (2.20, 2.95)	2.10 (1.83, 2.42)	2.22 (2.01, 2.45)
Age per 10 years	1.85 (1.74, 1.97)	1.96 (1.82, 2.10)	1.68 (1.59, 1.77)	1.77 (1.70, 1.85)
Male	1.29 (1.13, 1.47)	1.74 (1.50, 2.01)	0.99 (0.86, 1.13)	1.23 (1.12, 1.34)
Black	0.91 (0.74, 1.13)	0.98 (0.80, 1.21)	1.56 (1.33, 1.83)	1.20 (1.06, 1.37)
Hispanic	0.99 (0.85, 1.16)	0.76 (0.64, 0.90)	0.64 (0.52, 0.78)	0.85 (0.76, 0.96)
Other	0.82 (0.66, 1.04)	0.98 (0.78, 1.25)	1.08 (0.86, 1.34)	0.93 (0.79, 1.09)
BMI	1.02 (1.01, 1.03)	1.02 (1.01, 1.02)	1.01 (1.00, 1.02)	1.02 (1.01, 1.02)
Diabetes	3.00 (2.61, 3.45)	2.58 (2.25, 2.96)	2.24 (1.94, 2.58)	2.57 (2.32, 2.84)
Non-Daily Alcohol Use	0.57 (0.50, 0.65)	0.61 (0.54, 0.68)	0.61 (0.54, 0.69)	0.61 (0.56, 0.66)
Daily Alcohol Use	0.57 (0.42, 0.77)	0.64 (0.49, 0.85)	0.77 (0.59, 1.02)	0.67 (0.55, 0.81)
High school diploma	0.85 (0.71, 1.02)	0.65 (0.54, 0.78)	0.70 (0.59, 0.83)	0.73 (0.64, 0.82)
Some college	0.85 (0.71, 1.03)	0.57 (0.47, 0.69)	0.68 (0.57, 0.82)	0.71 (0.62, 0.80)
College degree	0.63 (0.52, 0.77)	0.39 (0.32, 0.48)	0.50 (0.41, 0.61)	0.50 (0.43, 0.57)
Physical activity	0.65 (0.57, 0.73)	0.66 (0.58, 0.74)	0.65 (0.57, 0.73)	0.66 (0.60, 0.71)
* Adjusting for tobacco smoking status, age, sex, race, BMI, diabetes, alcohol use, educational attainment, physical activity				
[†] Days used in last 30 days divided by 30. Non-use scored as 0/30=0, use 15 days/month scored as 15/30=0.5, and daily use scored 30/30=1, so aORs correspond to risk of daily use compared to non-use.				
[‡] Boldface indicates statistical significance (p<0.05)				
BMI, body mass index; BRFSS, Behavioral Risk Factor Surveillance System; CHD, coronary heart disease; MI, myocardial infarction				

Table S6: Adjusted odds ratio for the association between days of cannabis use per 30 days, tobacco cigarette use, and the interaction between current cannabis use and current tobacco use with cardiovascular outcomes in BRFSS respondents at risk for premature cardiovascular disease (men <55 years, women <65 years).*

	CHD	MI	Stroke	Composite outcome of CHD, MI, Stroke
Cannabis Use [†]	1.31 (0.91, 1.90)	1.29 (0.99, 1.69)	1.48 (1.09, 2.01) [‡]	1.38 (1.12, 1.71)
Former Tobacco Smoker	1.64 (1.43, 1.89)	1.68 (1.46, 1.94)	1.40 (1.21, 1.62)	1.54 (1.40, 1.69)
Current Tobacco Smoker	2.17 (1.86, 2.53)	2.55 (2.18, 2.97)	2.07 (1.80, 2.39)	2.23 (2.01, 2.47)
Current cannabis use x Current tobacco cigarette use	0.98 (0.69, 1.39)	1.01 (0.76, 1.33)	1.10 (0.80, 1.50)	0.98 (0.79, 1.21)
Age per 10 years	1.85 (1.74, 1.97)	1.96 (1.82, 2.10)	1.68 (1.59, 1.77)	1.77 (1.70, 1.85)
Male	1.29 (1.13, 1.47)	1.74 (1.50, 2.01)	0.99 (0.86, 1.13)	1.23 (1.12, 1.34)
Black	0.91 (0.74, 1.13)	0.98 (0.80, 1.21)	1.56 (1.33, 1.83)	1.20 (1.06, 1.37)
Hispanic	0.99 (0.85, 1.16)	0.76 (0.64, 0.90)	0.64 (0.52, 0.78)	0.85 (0.76, 0.96)
Other	0.82 (0.66, 1.04)	0.98 (0.78, 1.25)	1.08 (0.86, 1.34)	0.93 (0.79, 1.09)
BMI	1.02 (1.01, 1.03)	1.02 (1.01, 1.02)	1.01 (1.00, 1.02)	1.02 (1.01, 1.02)
Diabetes	3.00 (2.61, 3.45)	2.58 (2.25, 2.96)	2.24 (1.94, 2.58)	2.57 (2.32, 2.84)
Non-Daily Alcohol Use	0.57 (0.50, 0.65)	0.61 (0.54, 0.68)	0.61 (0.54, 0.69)	0.61 (0.56, 0.66)
Daily Alcohol Use	0.57 (0.42, 0.77)	0.64 (0.49, 0.85)	0.77 (0.58, 1.01)	0.67 (0.55, 0.81)
High school diploma	0.85 (0.71, 1.02)	0.65 (0.54, 0.78)	0.70 (0.59, 0.83)	0.72 (0.64, 0.82)
Some college	0.85 (0.71, 1.03)	0.57 (0.47, 0.69)	0.68 (0.57, 0.82)	0.71 (0.62, 0.80)
College degree	0.63 (0.52, 0.77)	0.39 (0.32, 0.48)	0.50 (0.41, 0.61)	0.50 (0.43, 0.57)
Physical activity	0.65 (0.57, 0.73)	0.66 (0.58, 0.74)	0.65 (0.57, 0.73)	0.66 (0.6, 0.71)

* Adjusting for age, sex, race, BMI, diabetes, alcohol use, educational attainment, physical activity
[†] Days used in last 30 days divided by 30. Non-use scored as 0/30=0 and daily use scored 30/30=1, so aORs correspond to risk of daily use compared to non-use.
[‡] Boldface indicates statistical significance (p<0.05)
 BMI, body mass index; BRFSS, Behavioral Risk Factor Surveillance System; CHD, coronary heart disease; MI, myocardial infarction

Table S7: Adjusted odds ratios of association days of cannabis use per 30 days with cardiovascular outcomes in BRFSS respondents never-tobacco cigarette users at risk for premature cardiovascular disease (men <55 and women <65 years).*

	CHD	MI	Stroke	Composite outcome of CHD, AMI, Stroke
Cannabis Use [†]	2.36 (1.25, 4.45) [‡]	1.56 (0.98, 2.48)	2.40 (1.42, 4.07)	2.13 (1.44, 3.13)
Age per 10 years	1.79 (1.63, 1.95)	1.89 (1.68, 2.13)	1.66 (1.53, 1.80)	1.71 (1.61, 1.82)
Male	1.23 (0.99, 1.51)	1.65 (1.28, 2.13)	0.93 (0.75, 1.16)	1.12 (0.97, 1.29)
Black	1.05 (0.78, 1.42)	1.19 (0.86, 1.65)	1.77 (1.40, 2.23)	1.38 (1.16, 1.65)
Hispanic	1.19 (0.94, 1.52)	0.91 (0.70, 1.19)	0.67 (0.50, 0.89)	0.96 (0.80, 1.14)
Other	0.77 (0.55, 1.07)	0.91 (0.58, 1.44)	0.63 (0.44, 0.90)	0.75 (0.57, 0.98)
BMI	1.03 (1.01, 1.04)	1.02 (1.00, 1.03)	1.02 (1.01, 1.03)	1.02 (1.02, 1.03)
Diabetes	2.84 (2.24, 3.58)	2.42 (1.91, 3.05)	2.07 (1.65, 2.59)	2.49 (2.13, 2.91)
Non-Daily Alcohol Use	0.68 (0.55, 0.83)	0.67 (0.55, 0.83)	0.63 (0.52, 0.77)	0.68 (0.60, 0.77)
Daily Alcohol Use	0.49 (0.27, 0.90)	0.51 (0.29, 0.89)	0.84 (0.49, 1.44)	0.66 (0.45, 0.96)
High school diploma	0.78 (0.55, 1.09)	0.57 (0.40, 0.80)	0.69 (0.5, 0.97)	0.68 (0.54, 0.85)
Some college	0.85 (0.60, 1.20)	0.48 (0.33, 0.68)	0.62 (0.44, 0.87)	0.65 (0.52, 0.82)
College degree	0.67 (0.48, 0.95)	0.37 (0.26, 0.52)	0.51 (0.36, 0.72)	0.50 (0.40, 0.63)
Physical activity	0.55 (0.45, 0.67)	0.57 (0.46, 0.71)	0.58 (0.48, 0.71)	0.58 (0.50, 0.66)
* Adjusting for age, sex, race, BMI, diabetes, alcohol use, educational attainment, physical activity				
[†] Days used in last 30 days divided by 30. Non-use scored as 0/30=0 and daily use scored 30/30=1, so aORs correspond to risk of daily use compared to non-use.				
[‡] Boldface indicates statistical significance (p<0.05)				
BMI, body mass index; BRFSS, Behavioral Risk Factor Surveillance System; CHD, coronary heart disease; MI, myocardial infarction				

Table S8: Adjusted odds ratio for the association between days of cannabis use per 30 days and cardiovascular outcomes in BRFSS respondents never-tobacco smokers and never tobacco e-cigarette users that are at risk for premature cardiovascular disease (men <55 years, women <65 years).*

	CHD	MI	Stroke	Composite outcome of CHD, AMI, Stroke
Cannabis Use [†]	1.80 (0.84, 3.89)	1.41 (0.67, 2.95)	2.51 (1.22, 5.14) [‡]	1.82 (1.06, 3.11)
Age per 10 years	1.84 (1.64, 2.07)	1.85 (1.56, 2.20)	1.54 (1.40, 1.70)	1.65 (1.52, 1.79)
Male	1.28 (0.97, 1.67)	1.65 (1.20, 2.28)	0.87 (0.66, 1.13)	1.11 (0.93, 1.32)
Black	1.01 (0.70, 1.45)	1.20 (0.81, 1.78)	1.6 (1.20, 2.13)	1.31 (1.05, 1.63)
Hispanic	0.96 (0.69, 1.33)	0.68 (0.50, 0.94)	0.61 (0.42, 0.90)	0.78 (0.62, 0.98)
Other	0.79 (0.52, 1.19)	0.85 (0.47, 1.54)	0.55 (0.37, 0.81)	0.7 (0.50, 0.99)
BMI	1.02 (1.00, 1.04)	1.01 (0.99, 1.03)	1.03 (1.01, 1.04)	1.02 (1.01, 1.04)
Diabetes	3.00 (2.29, 3.94)	2.29 (1.71, 3.08)	1.89 (1.43, 2.49)	2.36 (1.96, 2.84)
Non-Daily Alcohol Use	0.72 (0.56, 0.93)	0.66 (0.51, 0.84)	0.62 (0.49, 0.78)	0.68 (0.58, 0.79)
Daily Alcohol Use	0.58 (0.30, 1.14)	0.54 (0.28, 1.06)	0.94 (0.50, 1.76)	0.74 (0.48, 1.15)
High school diploma	0.71 (0.46, 1.09)	0.52 (0.34, 0.81)	0.65 (0.43, 0.97)	0.61 (0.46, 0.81)
Some college	0.82 (0.53, 1.28)	0.42 (0.27, 0.65)	0.57 (0.38, 0.88)	0.59 (0.44, 0.79)
College degree	0.61 (0.39, 0.94)	0.33 (0.21, 0.51)	0.45 (0.30, 0.69)	0.45 (0.34, 0.60)
Physical activity	0.52 (0.41, 0.66)	0.49 (0.38, 0.64)	0.60 (0.47, 0.76)	0.54 (0.46, 0.64)
* Adjusted for age, sex, race, BMI, diabetes, alcohol use, educational attainment, physical activity				
[†] Days used in last 30 days divided by 30. Non-use scored as 0/30=0 and daily use scored 30/30=1, so aORs correspond to risk of daily use compared to non-use.				
[‡] Boldface indicates statistical significance (p<0.05)				
BMI, body mass index; BRFSS, Behavioral Risk Factor Surveillance System; CHD, coronary heart disease; MI, myocardial infarction				

Table S9: Adjusted odds ratio for the association between days of cannabis use consumed primarily through smoking per 30 days and cardiovascular outcomes in BRFSS respondents ages 18-74.*

	CHD	MI	Stroke	Composite outcome of CHD, AMI, Stroke
Cannabis Use [†]	1.14 (0.92, 1.41)	1.26 (1.04, 1.52) [‡]	1.5 (1.22, 1.85)	1.3 (1.12, 1.51)
Former Smoker	1.71 (1.58, 1.85)	1.77 (1.64, 1.92)	1.46 (1.33, 1.6)	1.63 (1.53, 1.73)
Current Smoker	1.96 (1.76, 2.19)	2.64 (2.38, 2.92)	2.03 (1.84, 2.24)	2.15 (2, 2.32)
Age per 10 years	1.86 (1.8, 1.92)	1.88 (1.82, 1.94)	1.62 (1.57, 1.68)	1.79 (1.75, 1.84)
Male	1.71 (1.59, 1.83)	2.06 (1.92, 2.22)	1.14 (1.06, 1.23)	1.56 (1.49, 1.65)
Black	0.71 (0.62, 0.82)	0.81 (0.71, 0.93)	1.53 (1.36, 1.71)	1.02 (0.93, 1.11)
Hispanic	0.78 (0.69, 0.89)	0.77 (0.67, 0.88)	0.62 (0.53, 0.73)	0.75 (0.69, 0.82)
Other	0.93 (0.77, 1.13)	0.99 (0.83, 1.17)	1.06 (0.89, 1.26)	0.99 (0.87, 1.13)
BMI	1.02 (1.02, 1.03)	1.02 (1.01, 1.02)	1.01 (1, 1.01)	1.02 (1.02, 1.02)
Diabetes	2.38 (2.19, 2.58)	2.26 (2.09, 2.45)	1.95 (1.78, 2.13)	2.23 (2.1, 2.37)
Non-Daily Alcohol Use	0.67 (0.62, 0.72)	0.68 (0.63, 0.73)	0.62 (0.57, 0.68)	0.66 (0.62, 0.69)
Daily Alcohol Use	0.74 (0.61, 0.9)	0.7 (0.58, 0.84)	0.71 (0.6, 0.83)	0.7 (0.62, 0.79)
High school diploma	0.79 (0.7, 0.9)	0.74 (0.66, 0.84)	0.76 (0.67, 0.87)	0.75 (0.68, 0.82)
Some college	0.82 (0.72, 0.94)	0.7 (0.62, 0.79)	0.73 (0.65, 0.83)	0.73 (0.66, 0.8)
College degree	0.69 (0.6, 0.79)	0.5 (0.44, 0.57)	0.53 (0.46, 0.61)	0.55 (0.5, 0.61)
Physical activity	0.74 (0.69, 0.8)	0.73 (0.67, 0.79)	0.64 (0.59, 0.69)	0.71 (0.67, 0.75)

* Adjusted for age, sex, race, BMI, diabetes, alcohol use, educational attainment, physical activity
[†] Days used in last 30 days divided by 30. Non-use scored as 0/30=0 and daily use scored 30/30=1, so aORs correspond to risk of daily use compared to non-use.
[‡] Boldface indicates statistical significance (p<0.05)
 BMI, body mass index; BRFSS, Behavioral Risk Factor Surveillance System; CHD, coronary heart disease; MI, myocardial infarction

Table S10: Effect estimates of cannabis use on atherosclerotic heart disease by outcome using different analytical approaches.

Cannabis Use	CHD	MI	Stroke	Composite outcome of CHD, MI, Stroke	n
Accounting for days used per month (i.e., results in Table 2)	1.16 (0.98, 1.38)	1.25 (1.07, 1.46)[‡]	1.42 (1.20, 1.68)	1.28 (1.13, 1.44)	434,104
Daily use vs no use (i.e., excluding non-daily users)	1.13 (0.94, 1.37)	1.22 (1.03, 1.44)	1.50 (1.25, 1.79)	1.29 (1.13, 1.47)	411,055
Propensity matched analysis of daily use vs. no use	1.07 (0.88-1.30)	1.18 (0.98-1.41)	1.36 (1.11-1.67)	1.19 (1.04-1.36)	65,402
Bold results are statistically significant (p<0.05) Covariates the same in first two analyses. See Data S1 for details of propensity score matching					

Table S11: Distribution of covariates within sample (states during years where optional cannabis module was given, N=434,104) and out of sample (states during years when optional cannabis module was not given, N=1,133,056) among respondents ages 18-74. In-sample and out-of-sample covariates were distributed significantly different at the 95% confidence level except for sex (p=0.627) and stroke (p=0.054), which were not significantly different between in- and out- of samples. While there are statistically significant differences as shown, most quantifiable differences between sample characteristics are quite small.

	Out of Sample	In Sample	P-value
Demographics			
<i>Age</i>			
18-34 years	32.4 (32.3-32.6)	32.7 (32.4-33.0)	<0.001
35-64 years	54.0 (53.8-54.1)	53.9 (53.6-54.2)	
65+ years	13.6 (13.5-13.7)	13.4 (13.2-13.6)	
<i>Sex</i>			
Female	50.7 (50.5-50.8)	50.6 (50.1-50.8)	0.627
<i>Race</i>			
White	62.9 (62.7-63.1)	55.7 (55.4-56.0)	<0.001
Black	13.0 (12.9-13.1)	10.4 (10.2-10.6)	
Hispanic	16.4 (16.3-16.6)	22.3 (22.1-22.6)	
Other	7.7 (7.6-7.8)	11.5 (11.3-11.8)	
Socioeconomic status			
<i>Education</i>			
Less than high school	12.4 (11.3-12.5)	13.8 (13.5-14.0)	<0.001
High school	28.0 (27.9-28.2)	26.4 (26.2-26.7)	
Some college	30.9 (30.8-31.1)	31.6 (31.3-31.9)	
Graduated college	28.6 (28.5-28.8)	28.2 (27.9-28.4)	
Substance use			
<i>Tobacco Smoking</i>			
Never tobacco smoker	60.4 (60.2-60.5)	62.5 (62.2-62.8)	<0.001
Former tobacco smoker	22.6 (22.5-22.7)	22.1 (21.8-22.3)	
Current tobacco smoker	17.0 (16.9-17.2)	15.4 (15.2-15.7)	
<i>Alcohol</i>			
Non-use	44.9 (44.7-45.1)	46.7 (46.3-47.1)	<0.001
Non-daily use	50.8 (50.6-51.0)	49.0 (48.6-49.4)	
Daily use	4.3 (4.2-4.4)	4.2 (4.1-4.4)	
Chronic conditions			
Obese	31.9 (31.7-32.1)	30.4 (30.1-30.7)	<0.001
Diabetes	10.0 (9.9-10.1)	10.0 (9.8-10.1)	0.002
Physical activity	75.7 (75.5-75.8)	76.7 (76.4-76.9)	<0.001
CHD	3.4 (3.3-3.4)	3.2 (3.0-3.2)	0.019
Myocardial infarction	3.6 (3.5-3.6)	3.3 (3.2-3.4)	0.006
Stroke	2.7 (2.6-2.8)	2.6 (2.5-2.7)	0.054
Composite (CHD, MI, stroke)	7.2 (7.1-7.3)	6.8 (6.6-6.9)	0.008